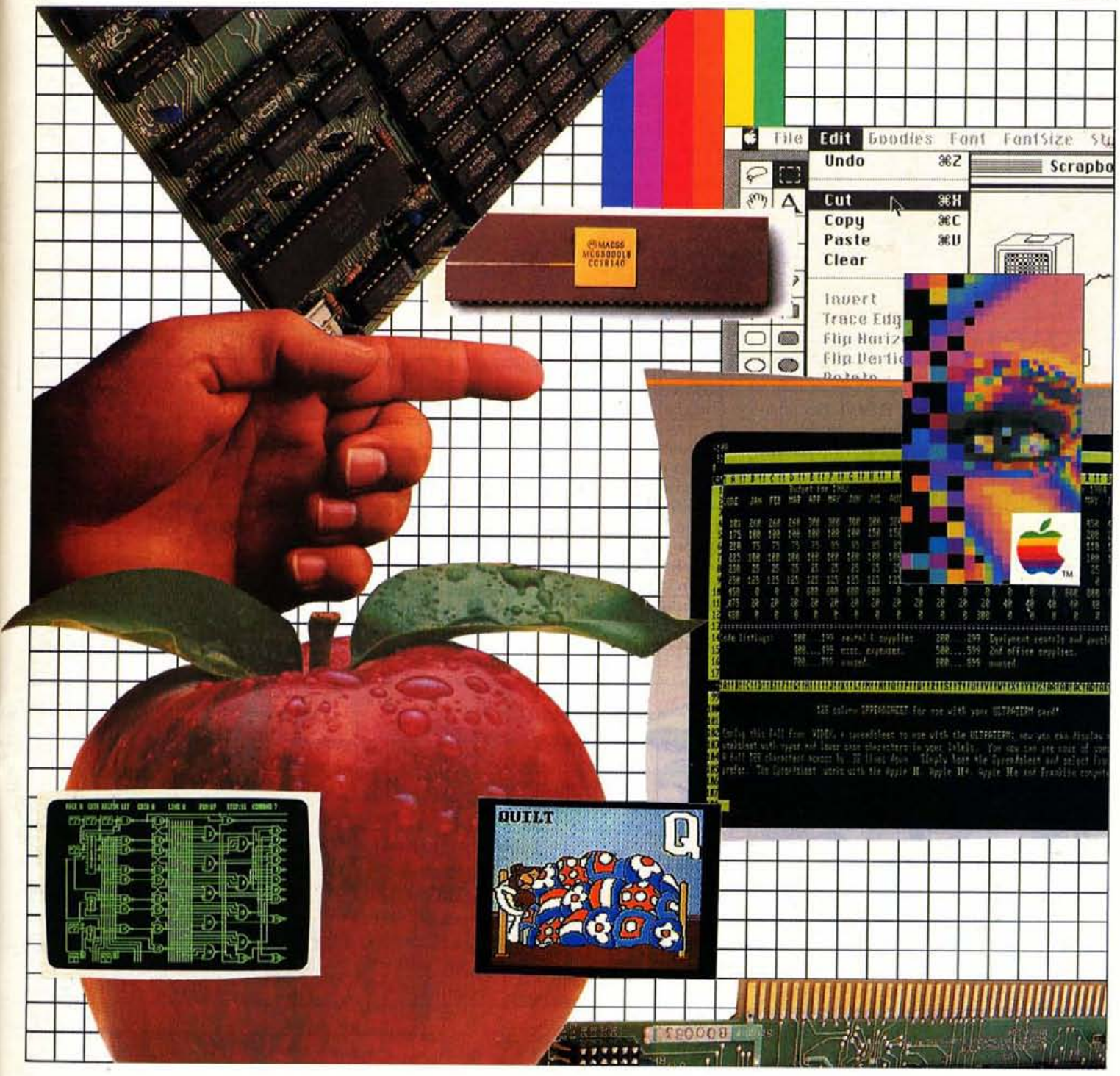
Apple2000

THE NATIONAL APPLE USERS GROUP

JUNE 1987 VOLUME 2 (3)



More program power!

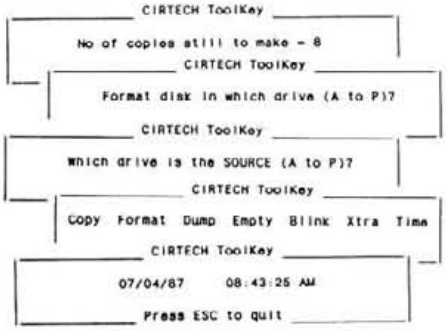
A sophisticated, new operating system for the IIGS

The CIRTECH CP/M Plus System lets you use the huge range of CP/M programs, like Wordstar and dBASE, on your Apple IIGS. The CP/M Plus System comprises a lightning-fast, co-processor card and the most advanced version of the CP/M Plus Operating System software specially designed to fully utilise the powerful features of the GS.

The compact hardware card plugs into one of the standard GS expansion slots and has been designed with a fast 8 MegaHertz Z80H microprocessor to boost the speed of your programs – and *for extra speed*, the GS operates in fast mode with the CP/M Plus System!

The CP/M Plus Operating System is full of versatile, user-friendly features. Special *ToolKey* utilities instantly pop up in a unique window display and you can use them all **at any time**, *even in the middle of running a program!*

- **COPY** and **FORMAT** are inbuilt disk formatter and copier functions for all standard types of disks (3.5, Profile, SCSI, 5.25, etc.) – *no more problems running out of disk space in the middle of a program!*
- **DUMP** lets you print an instant 'snapshot' of the current text screen at any time.
- **EMPTY** clears the internal printer and auxilliary output buffers. *Yes, the CIRTECH CP/M Plus System has an inbuilt printer buffer (spooler) 12K in size* – that's enough for about 20 A4 pages!



- **BLINK** controls the cursor – *you have the choice of blinking or static!*
- **XTRA** lets you print multiple copies of everything that's in the printer buffer at any time during a CP/M program; *and printing is in 'background mode', so you save time too!*
- **TIME** instantly displays a neat, on-screen window giving you the current time and date – *no excuses for being late now!*

FILE MANAGER

The unique File Manager, with its clear, pull-down windows, lets you see exactly what programs and files are on each disk. *Not only that, you can use the File Manager to run or display files, select user areas, and copy, delete or rename files – using CP/M has never been faster or easier!*

RAMCALC

The CIRTECH CP/M Plus System also features **RAMCALC**, an *ON-SCREEN, FULL FUNCTION CALCULATOR* which you can call up instantly any time you want from within any CP/M program. The calculator has all the normal arithmetic functions *plus* percentage, square root and memory! *And there's no problem if you put RAMCALC away without noting the answer, just call it back and it appears again instantly, exactly as you left it, right down to remembering what's in memory!*

The CP/M Plus System also lets you use the AppleMouse with any CP/M program or change the Mouse control characters with the 'SETMOUSE' utility. The System is fully compatible with all standard CP/M programs and is supplied with over 40 utility programs, including extensive disk-based 'Help' files. All Apple-standard devices such as UniDisk, Disk II 5.25 drives, 3.5 drives and ProFile or SCSI hard disk drives are fully supported – *you can even use ProDOS and CP/M Plus on the same hard disk!* The System is also fully compatible with plusRAM-GS and other Apple standard memory expansion cards.

FOR TOP PERFORMANCE AND SPEED – CIRTECH CP/M PLUS – ONLY £118.00

Also available for the 128K //e and //c (3.5 or 5.25 disk format)

(Prices exclude VAT)

CIRTECH (UK) LIMITED, Currie Road Industrial Estate, Galashiels
Selkirkshire, Scotland, TD1 2BP Telephone (0896) 57790
Telex 265871 (Attn. 84:CPD001)–Telecom Gold Source Mailbox–AAH555

Apple2000

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EDITORIAL

Desktop Publishing enters the second generation and expands down towards the Apple II range.

Apple were the pioneers of Desk-Top Publishing just over eighteen months ago. We now find ourselves already well into the second generation of both software and hardware.

The advent of 600 d.p.i. Lasers will ensure that real camera ready artwork will be within the reach of many professional users who still have to rely on Linotronic or traditional typsetting.

The second generation of software has suddenly engulfed the market with a wealth of real typsetting standard WYSIWYG programs.

The first of these are now available and we hear that more are on the way.

The Macintosh will soon have a big brother in the Mac II but we must not forget the Apple IIGS which is certain to get some really powerful soft-ware as soon as Apple have sorted out the printer interface. Remember that the GS has the same Appletalk connector and will be able to talk to the Laserwriter and presumably to the Mac as well. This will enable a whole network of Apple machines to work together. DTP has a top and bottom end and the bottom end is represented by some very sophisticated word processors.

Apple Scene gets going.

The last few weeks have seen the whole Apple scene hot up with real programmes arriving for the GS and a whole host of equipment for the Macintosh.
MICE 87 was cut down just to a Workshop and Lectures, the number of Users who turned up was small but the quality was good. We really could have done with an exhibition to get users and potential users up-to-date with all the new equipment and software now available - they will have to wait until the MacUser Show in November !

ALL CHANGE AT THE FRONT DESK

Sheila Hirst, who has been our administrator for the last four years, has recently taken up a full-time post in a local business and can no longer devote her time to both activities.

We thank her on behalf of the membership for the hard work she has put into Apple2000 over the years, and wish her every success in her new venture.

For you the members this will mean a few changes (hopefully temporary) until we find another administrator, and we ask you to take note of the following arrangements:

The P.O.Box will remain operational for the present, so all mail should continue to be sent to P.O.Box 177, St.Albans, AL2 2EG.
The telephone number [illegible] is **NO LONGER** in use.

A temporary telephone number has been set up by Irene Flaxman, and this will operate as an Ansafone service during the daytime, and may be manned from 7.00 to 9.00 in the weekday evenings. If you get the Ansafone please state your reason for calling - and be patient, someone will get back to you.

THE NEW NUMBER TO RING IS
[illegible]

On page 74 you will find an advert for a new administrator if you feel that you can fill this position please let us know.

I hope that you will join us all at the Workshop in just a few days time ...

Jim Panks - Chairman/Editor

Comment

How not to sell an Apple

Apple machines are at the forefront of user friendliness and as such are quite capable of standing up to comparison with Big Blue and the clones. Unfortunately comparisons do not always work when you have the corporate market firmly set in the IBM mold.

Take the Macintosh for instance, it will sell itself to anyone who has to use a computer in a working environment just on it's ease of use. Many IBM users now happily use a Mac and would never dream of going back. Apple do not appear to want to sell machines, they have no sales force, no team of experts ready to rush machines into a likely environment and lastly no real advertising outside of the London area.

Many other manufacturers have a professional team of experts who can ensure dealers have powerful backup to clinch a deal. They do not actually sell machines directly they leave that to the dealers. What they do is ensure the prospective customer has the feeling that the manufacturer and dealer are working together and that this is the machine for them.

The Apple Test Drive was an excellent idea but it still required the prospective customer to make the first approach and this is where Apple should be more agressive.

If Apple could just get out into the marketplace and show off its wares then I am sure that the sales figures would rocket.

I know that Apple would say that they are trying but from where I sit it appears that they are just playing at selling and leaving much of the work to the dealers.

Please Apple lets have some action NOW.

P.S. My comment above is designed to get some reaction from Users, Dealers or even Apple.

I make it because I am selfish and the more Apple machines around the more software, hard-ware and literature that will be avail-able in the U.K. Also our market may just be taken more seriously by the Americans.

In the next issue we will have reviews of XPRESS, RSG3 and PageMaker 2.0 (!). Reviews of new products for the GS and plenty of Apple II material.

Club News - 1
The Local Group Scene

Tom Wright's look at group activities.

Well, they do say that you should not count your chickens before they are hatched, don't they? My optimism in the last column about the reported new group forming in **Potterspury** appears to have been misplaced, unless the Mr E Morgan that I referred to is very shy. I have received no reply to my letter to Mr Morgan and have been unable to track him down via the phone system. If anybody has maanaged to make contact with him and there really is a new group forming there please let me know so that I can pass the good news on to everybody else. There must still be more groups out there, even if there aren't let's get busy and get some going!

Still it isn't the first time we have had our leg pulled is it? Remember January 1985 when John Sculley said "Apple has now dropped all plans to provide IBM compatibility", everything changes. So how long will it be before we have the 26th addition to our list? Maybe not as long as you might be thinking . . .

The **CREWE COMPUTER USERS CLUB** Secretary has replied to an enquiry that I made several months ago and has provided some details of the club for us. The Crewe club was formed in August 1981 and is open to anyone who has an interest in computers. There are approximately forty members with two main areas of interest :

1. games, including some members who write machine code games.
2. general use packages, programming & software

Members and visitors are encouraged to bring their equipment to meetings which are held every two weeks. Although many of the members are BBC or QL users, the Treasurer is a discerning type (Apple II), and the Secretary is also choosy (Apple III). Paul Edmonds the Secretary will be pleased to answer all enquiries, and welcome new or prospective members. Although it is a general interest club it does have some Apple members and fills a gap for people in the Crewe area of Cheshire, why not go and have a look at them ?

The growth in our list of known Apple groups during the last year reflects not only the fact that there are a lot of users out there who want to make contact with their peers, but that there has been a great deal of work done by the people who do the mundane tasks that make each group viable. It is of course a fact that group organizers usually enjoy their work (even if most of them haven't yet realised or admitted it), and anybody thinking of starting a group can be reassured that while some of the tasks are mundane none of them are very demanding.

In saying that I'm not denigrating the work that organizers do as I have been fortunate enough to meet several of them, and have spoken with a lot of others on the phone, most of them do worry about their responsibilities to their members. If you're a member of a group please help the organizers (and yourselves by letting them know what you think of the group's organization and direction, and tell them what you would like to see the group doing.

Between the **User Council** and the group visits by Mary Ainsworth and her colleagues to various user groups we are being provided with opportunities to tell Apple U.K what we think of Apple's product range and declared plans; let's make sure that we don't waste those opportunities.

Last item before getting down to business is to remind everybody that we will be producing a Newsletter at bi-monthly intervals, to overlap with this magazine. Any group which hasn't yet started its own newsletter, or which would like one but hasn't got sufficient resource, is welcome to send through details of their forward programmes etc., and I'll include them in either the newsletter or the magazine.

This facility should be very useful to a number of groups, good group attendances and participation often follow regular reminders of the groups' activities.

The **MIDLAND MAC GROUP** June meeting, starting at 8.00pm will include Spreadsheets and TRAPEZE. A detailed look at Databases and which on is the best buy is scheduled for the July meeting. At least that's what Ike said, shouldn't be surprised if members also find themselves helping to iron out the program for the new reptile house's environmental control.

MIDAPPLE - Mary Ainsworth brought the Mac II for demonstration at the May meeting, an exccellent demonstration and talk was given which was thoroughly enjoyed by all the attending members. Celtip Computers provided a very interesting Desktop Publishing evening recently as another example of the interesting range of topics provided by this group.

GATEWAY COMPUTER CLUB - well worth a visit since the club is multi-interest, although it has a very large Apple membership which is in itself larger than a number of other groups.The club is working on plans for a display during the forthcoming Air Day so watch out for what should be a most interesting day. Anybody who hadn't seen Bob Hall during the period immediately prior to the Bewdley show would have been excused for not recognising him since his dispute with the Gillette company is now a thing of the past.

BENTWATERS APPLE USER GROUP - now that's what I call a dedicated bunch of Apple fanatics, some of them drove all the way from Bentwaters to the Bewdley show where they did a whistle stop tour, then vanished down the road to play with the Severn Valley Railway steam trains! The group's growth has continued and they now have about 40 members. A great deal of effort goes into tthe groups meeting timetable and they are well worth a visit. A computer show was organized by the group for Saturday May 16th, held at the BX Speciality Store.

EAST OF SCOTLAND APPLE USERS GROUP - membership has passed 20 now with a few other people turning up at some of the meetings. People in the Edinburgh area will benefit from a visit to this group. Although most regular members are Apple II users of various kinds a large proportion of meeting topics have in fact been Mac related so far, so all interests are being catered for.

GLASGOW GROUP - Donald Davidson tells me that the June meeting will cover Communications, venue will be Proteus Microsystems, 17, Park Circus Place. A lot of effort is going in to this group which provides an attractive facility for all users in this area.

continued on Page 4

Club News - 2
Local Group Contacts

more Group news

CAMBRIDGE USERS GROUP - a small but very keen group which has covered a range of interesting topics during group evenings. The groups newsletter is normally interesting and inventive in presentation forming a useful support to the meetings. The meeting venue is subject to some variation so be sure to phone Ian Archibald before going along.

LONDON APPLE COMPUTER CLUB - previously listed as the London Apple II Group. Chris Williams is happily able to tell us that the club's search for a stable venue is over thanks to the good offices of one of their members, you will find the new venue address in the list of group contacts. The L.A.C.C venue is located about 100 yards from Kings Cross station on the right hand side of York Way. Meetings are informal.

Anyone interested in the L.A.C.C should contact Chris on [illegible] a week or so before the meeting, or ring 01-833-8133 on the day of the meeting to check arrangements.

APPLE II PROGRAMMERS CLUB - Philip Dixon will be very happy to provide you with details of this club which has developed out off a newsletter based club founded by Philip some time ago. A2PC is a very welcome addition which provides a focal point for Apple users in the area. Anybody who is currently missing out on this opportunity please contact Philip to let him kknow that you are interested, and whether or not you are prepared to help with club organization. All Apple users are invited to join in.

CROYDON APPLE USER GROUP - had a very enjoyable May meeting at the premises of Southern Commerce Computers in Caterham, where their MD Jim Nayyar gave an explanation of Relational Databases and took the members through the stages of building a database using Omnis 3. He showed some of the specialist applications they have written with this very powerful tool.

If your group isn't mentioned this time, tell us about your activities for the next edition!

Local Group details

APPLE II PROGRAMMERS CLUB
CONTACT Phillip Dixon [illegible]
VENUE AppleCentre - North East, Ponteland
MEETS Check with Phillip

BENTWATERS APPLE USER GROUP
CONTACT John Thomas [illegible]
VENUE R.A.F. Woodbridge
MEETS 7.00pm 1st Tuesday of each month

BRISTOL GROUP (B.A.U.D.)
CONTACT Mike Farmer [illegible]
VENUE Bristol Maternity Hospital (may change)
MEETS 7th of each month, or nearest Friday

CAMBRIDGE APPLE USERS GROUP
CONTACT Ian Archibald [illegible]
VENUE Isons Cycles, 72 Chesteton Road, Cambridge
MEETS Fortnightly

CREWE COMPUTER USERS CLUB
CONTACT Paul Edmonds Tel: [illegible]
VENUE Christ Church Hall, Crewe. near to town centre, close to Police station. Ample car parking space.
MEETS Fortnightly, Fridays, 7.30pm to 10.00pm

CROYDON APPLE USER GROUP
CONTACT Graham Attwood [illegible] BSG008
VENUE 515 Limpsfield Road, Warlingham,Surrey
MEETS 7.30pm on the 3rd Thursday of every month

EAST MIDLANDS MAC USER GROUP
CONTACT Nick Helm [illegible]
VENUE Wilford Cricket & Rugby Club, Nottingham
MEETS 8.00pm on the 1st & 3rd Wednesday of month

EDINBURGH GROUP
CONTACT Adam Gilinsky [illegible]
VENUE Proteus Micro Systems, 55 Frederick Street
MEETS Monthly - check with Adam

ESSEX GROUP
CONTACT Pat Bermingham [illegible]
VENUE The Y.M.C.A., Victoria Road, Chelmsford
MEETS 3rd Friday of every month

FURNESS AREA
CONTACT Alan Curtiss [illegible]
There is new activity in this group. Contact them for details.

GATEWAY COMPUTER CLUB
CONTACT Robert Hall [illegible]
VENUE Bob Hope Recreation Centre, R.A.F. Mildenhall
MEETS Variable - check with Bob

GLASGOW GROUP
CONTACT Donald Davidson [illegible]
VENUE Proteus Micro Systems, 17 Park Circus Place
MEETS Quarterly - check with Donald

HANTS & BERKS
CONTACT Mike Hollyfield [illegible]
VENUE T.V.S., 128 High Street, Maidenhead
MEETS 7.00pm on the 2nd Monday of each month

HARROGATE AREA
CONTACT Peter Sutton [illegible]
No active organised group in this area but there are a number of keen Apple users in contact with each other.

HERTS & BEDS GROUP
CONTACT Norah Arnold [illegible]
VENUE The Old School, 1 Branch Road, Park Street St Albans, Herts
MEETS 8.00pm on 1st Tuesday of each month

KENT GROUP
CONTACT Richard Daniels [illegible]
VENUE Microspot, 5-11 London Road, Maidstone
MEETS 7.30pm on last Monday of month

LEICESTER GROUP
CONTACT Bob Bown [illegible]
VENUE Shakespeare Pub, Braunstone Lane, Leicester
MEETS 7.30pm on 1st Wednesday of each month

LIVERPOOL GROUP
CONTACT Irene Flaxman [illegible]
VENUE Check with Irene
MEETS 2nd Monday of each month

LONDON APPLE COMPUTER CLUB
CONTACT Chris Williams [illegible]
VENUE Studio 8, Wharfedale Projects, 47, Wharfedale ROad, London, N1 9SE
MEETS First Wednesday every month.6.00pm to 9.00pm

LONDON MACINTOSH GROUP
CONTACT Maureen de Saxe [illegible]
VENUE Room 683, London University Institute of Education, Bedford Way, London WC1
MEETS 6.00pm on 2nd Tuesday of each month

MACINTOSH USERS GROUP (CAMBRIDGE)
CONTACT Patrick Winterson [illegible]
VENUE Cambridge area - check with Patrick
MEETS Every 3 months - check with Patrick

MIDAPPLE
CONTACT Tom Wright [illegible]
VENUE I.T.E.C., Tildasley Street, West Bromwich
MEETS 7.00pm on 2nd Friday of each month

THE MIDLAND MAC GROUP
CONTACT Ivan Knesovich [illegible]
VENUE Spring Grove House, Safari Park, Bewdley
MEETS 7.00pm on 1st Tuesday of each month

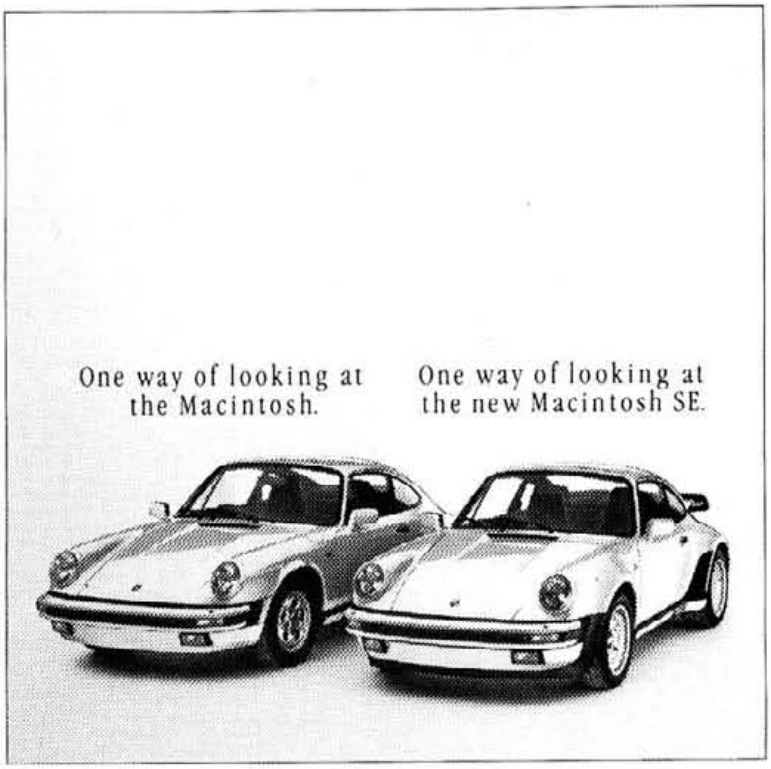
THE NORTH WEST APPLE COMPUTER CLUB
CONTACT Jim Roscoe [illegible]
VENUE Horse & Jockey Pub, Winwick Road, Warrington
MEETS 1st Monday of each month

THE NORTH WEST APPLE USERS GROUP
CONTACT Max Parrot [illegible]
VENUE Staff House (2nd floor), U.M.I.S.T., P.O.Box 88 Sackville Street, Manchester
MEETS 8.00pm on last Thursday of each month

MACTAFF - S.WALES MAC GROUP
CONTACT Lorrain Thornback [illegible]
VENUE AppleCentre, 47 Newport Road, Cardiff
MEETS 7.00pm on 1st Thursday of each month

NEW GROUP

ESSEX MAC GROUP
CONTACT Mick Foy [illegible]
VENUE D.P.S. Acorn House Little Oaks Basildon Essex
MEETS 8.00 pm First Monday of Month



To stay ahead in business you need a computer with plenty of performance.

The new Macintosh SE has more power and up to twice the speed to meet the demands of increasingly sophisticated business software.

And its more flexible so you can now create computer systems tailored to your specific needs and share information with other computers, regardless of their size or make.

However the only way to really assess the performance of the new Macintosh SE is to visit us for a test drive.

Because if you're not running a Macintosh, you could get left behind.

Apple. The power to succeed.

Club News - 3

From the Hotline

Dave Ward explains some answers prompted by Hotline enquiries.

GS Memory or Drives?

The Apple Language card which is designed to fit into slot zero of Apple][andApple][plus computers to bring their memory complement to 64K can sometimes cause a problem (although, in my opinion, it is rather minor).

As well as the16K of RAM memory the card also contains the Autostart ROM ($F800-$FFFF) which may cause a conflict if other 16K or multiple 16K expansion cards (eg Saturn128K card) are used in other slots. This is because the top 2K of memory on the card is always selected as the Autostart ROM. Therefore even if another 16K bank of memory on another card is selected the top 2K of its RAM is not available and means that a 128K card will effectively lose 16K. Any programs will have to recognise that only 14K is available from each 16K bank!!

Most other 16K RAMcards do not have this feature so there is no problem. A method whereby an Apple Langauge card can be modified to remove this conflict is described in 'Understanding the Apple][by Jim Sather & published by Quality Software. (See section 5-42 for the detailed method).

The reasoning behind the inclusion of the Autostart ROM on the Apple Language card is purely to make the older Apple][machine behave as an Apple][+ machine. At the time of change from the Apple][to the Apple][+ this was a very inexpensive upgrade.

Most purchasers of the new Apple IIGS computer will have a system with a single 3.5" disk drive and preferably one or two 5.25" drives. At least one 5.25" drive is essential since most software is still supplied on that medium.

With a single 3.5" drive there is, however, a problem with copying these diskettes. It is true that Apple supply Mousedesk which will copy whole diskettes or files, but this program does not recognise extra memory as a 'buffer' and so will only copy over 117K. As a consequence diskettes have to be swapped many times and copying a full diskette can take five to ten minutes PHEW!! Copying a diskette by files has been known to take half-an-hour. Fortunately Bill Basham of Diversified Software Research Inc. (remember Diversi-DOS) has updated his Diversi-COPY program diskette to include a 3.5" diskette copy program that will work on all Apple computers with a 3.5" drive connected!

The program recognises most of the popular memory cards available and will copy full diskettes in a single pass on an Apple IIGS with a megabyte of memory in the special IIGS memory expansion slot.

Since most Apple IIGS owners will require extra memory, up to a megabyte, to run future software why buy a second 3.5" drive unless it is absolutely necessary. You can get a megabyte card plus Diversi-COPY for less than the cost of a new 3.5" drive and still easily backup your 800K 3.5" diskettes quickly.
I would recommend Apple IIGS owners to consider this option carefully before considering the purchase of another 3.5" drive. You should note that the memory expansion cards for the Apple IIGS will only fit into the special slot. These cards are not compatible with other Apple computers and will die horribly if put into slots 1-7 even in an Apple IIGS.

(1) Diversi-COPY is available from :-
Diversified Software Research Inc.
34880 Bunker Hill
Farmington
MI 48018-2728 cost is $30

2) Apple 256K GS expansion card can be upgraded to 512K in one step and in another step to a megabyte.

3) Cirtech 256K plusRAM GS2 can be upgraded to 2 megabytes in 256K increments. Also plusRAM GS8 is a megabyte card that can be upgraded to 8 megabytes.

4) A Texan company Applied Engineering supply GS-RAM which is a card available with memory from 256K to 1.5 megabytes. Also GS-RAM Plus with 1-8 megabytes is available. Both these are supplied by Bidmuthin Technologies.

This list may not be complete but the three Apple IIGS memory expansion cards are the most popular and you can compare prices in Apple2000 magazine!

We will be reviewing the Diversi-COPY program and the Cirtech plusRAM GS2 in a future issue.

Go to your Local

I have, on occasions, suggested to members that they join a local group to help solve their problems. This is, in particular, good advice to members who have just purchased their first Apple computer. A reasonable sized local group will have members with a diversity of interests and there will always be somebody who will be prepared to discuss your problem.

For instance my local group, MIDAPPLE (an independent group), meet at the Sandwell ITEC where at least 25 Apple computers are generously made available. There are over 30 members all with different interests so help on almost any subject is available. Another advantage is that we regularly have demonstrations of new Apple products. For instance in May our committee inviegled Chris Calvert and Mary Ainsworth of Apple UK to give up a Friday evening to provide a marvellous demonstration of the new Macintosh computers. Three cheers Chris and Mary! Why not consider joining your local group?

Long live the //e!

Apple Computer Inc. have again bowed to customer demands by keeping the Apple //e on their books. It just seems that the Apple //e cannot be rationalised!

On this theme I must report that a few members have asked me why they can't upgrade their Apple //e to an Apple IIGS like they can over the pond in the US of A.

Apple UK have always stated that they have pitched the price of the Apple IIGS to make this uneconomic. What do you think? It appears that if enough of us want to follow this upgrade path Apple UK may think again.

Ring the Hotline on 08893 2192

LEAP AHEAD OF THE GAME

The Gazelle
is an integrated communications program written in Assembly Language for APPLE //e, //c and //GS

The Gazelle
offers BRILLIANT COLOUR – and a Viewdata Frame Editor with Carousel. Download as many frames as you like, edit them then carousel the display with timer control.

The Gazelle
is State-of-the-Art Prodos communications software.

- EASY TO USE
  Select Commands with Mouse, Alphabetic or Cursor Keys
- UNIQUE FRIENDLY INTERFACE
  Pull-Down Menus
- WRITTEN BY EWEN WANNOP
  Well-known brainy boffin
- DIRECT ACCESS TO HELP SCREENS
  from any point in program
- SENDS APPLEWORKS files and DOWNLOADS Email as AWP files
- STATUS BAR DISPLAY
  Shows Buffer, Speed, Date & Time
  Stays active while online
- FAST IN USE
  Memory-resident Program
- FILE CONVERSION from DOS 3.3
- CONTINUOUS SPOOLING
  Up to 30 Megabytes
- BUILT-IN CLOCK
  (for Mousecard & //c)
- LARGE 44k CAPTURE BUFFER
- TEXT EDITING & MACRO FACILITIES

Leap sure footed with the GAZELLE
into File Transfers, Telecom Gold, Telex and Prestel!

GAZELLE

Special Trade-In Offer

Upgrade your existing comms
Send us the **original disc** from ANY comms package for a **£20 Trade-In !!**

Order by Cheque or Postal Order
£75.00 + VAT (£55.00 + VAT if with Trade-in)
From **KOLOUR SOFTWARE LIMITED**
[illegible]

Computer Doctors

Deep in the 'Garden of England' we find the hallowed workshop of MicroServe

MicroServe is the name of a small company devoted to the repair of computer equipment. They are located just across the road from Brands Hatch in a smart Industrial Estate setting.

MicroServe has been servicing Apple Equipment for over three years now, until recently being a full Level 1 Apple service centre running from the AMP Apple Dealership.

The engineers have a knowledge of many makes of machine but you get the impression when talking to them that they enjoy working with Apple's of all types.

Recently I had cause to use MicroServe when my Macintosh power supply died, I rang them to see if they had one in stock (none of the local Apple dealers had one) to which they replied YES. I then drove over and they fitted an exchange board within minutes. Amazing service, but that is not all - whilst the machine was open they gave it the once over and pronounced it fit.

The workshop is modern and contains a wealth of Apple history, with machines, cards, power supplies and the like stored on neat shelving.

Symbiotic hard drives appear to be another speciality with a massive amount of technical knowledge and expertise available. Again it is nice to chat to technicians who know what they are talking about and who do not look down there noses at you. The staff are quite happy to explain the why's and wherefore's of particular equipment.

Servicing equipment is just one side of the story, the other is the maintenance contract side - here MicroServe offer an efficient back-up service when the equipment starts to play up. Many readers will have their whole business dependent on the machine occupying an office or two. If the machine stops then so does the business. MicroServe are willing to quote for any type of maintenance contract on any type of machine.

Having heard from other members about the efficient service offered by MicrServe I would like to add my recommendation.

MicroServe,
Blue Chalet Industrial Park,
West Kingsdown, Kent
☎ 047 485 4311

Workshop2000

An event organised by Apple2000 **Helping the Apple User**

Apple II GS
Apple //e
Apple //c
Apple II+
Macintosh
Laserwriter

Saturday 27th June 1987
Elm Grove Meeting Rooms
High Street
Walton-on-Thames
Surrey

Apple II GS
Apple //e
Apple //c
Apple II+
Macintosh
Laserwriter

The venue is in the High Street just behind the Magistrates Court. It is close to the M3, M25 and A30. Nearest BR Station Walton-on-Thames (5 mins walk)

Apple Computer will be attending and hopefully will bring along the new Macintosh II.

Blyth Software will be sending along a member from the Technical Support Team to answer Omnis questions.

Bidmuthin Technologies are the Apple II importers of many hardware add-ons and they will be showing off the latest from the United States.

Dark Star the ever popular wizards of the Apple II hardware scene will be showing the wide range of add-ons to make your Apple sparkle.

Heyden & Son will be present with the latest software for the Macintosh - see the second generation of programs in action.

Greengate - Masters of Apple Music - see the people but hear that sound!

MacTel Our friends on the Macintosh side of things will hopefully have a presence.

MGA MicroSystems MGA have excelled in getting the latest from the U.S. I wonder what surprises they will have.

MicroServe Repairers to the trade, MicroServe will be on hand to answer any hardware problem and talk about Service Contracts.

Sams of Wimbledon. No not the Wombles but one of the best Apple Dealers in London. AppleCentre in the City will also be represented.

A whole room full of Apple machines and experts to answer your questions and help you get more out of your machine.

Other non-trade experts on hand will include:
Graham Attwood (IIGS)
Dave Ward (IIGS)
William Watson (IIGS).
Jim Panks (DTP - Macintosh)
Norah Arnold (Graphics II & Mac)
Ewen Wannop (Comms & IIGS)
Irene Flaxman (Spreadsheets Mac & III)
Keith Chamberlain (Omnis - Mac & II)

If you use an Apple in your business or at home then Workshop2000 is the place to get all the facts and unbiased information. And you never know you may even learn a thing or two.

See you there !!!

Admission Prices

Open 1000 - 1700 hours.
Admission to Members £3.50
Spouses and Children free.
Admission to non-members £28.50
(includes membership for 1987)

The Big U

Dave Ward dives into the latest Beagle Brothers ProDOS Utilities for the Apple // series.

Remember DOS BOSS a diskette of utilities published by a new software company BEAGLE BROS in 1980. Since then Beagle Bros have produced and published a wide variety of utility diskettes for the Apple // range of computers.

A little over a year ago THE BIG U was published which is a 5.25" diskette crammed with ProDOS utilities and is the subject of this review. Beagle Bros. only supply fully copyable diskettes so immediately make a backup with any normal copy program - don't use 'nibble copiers'. *Note that Beagle Bros. are still in business seven years on and apparently thriving: so is copy protection really necessary?*

The diskette is accompanied by a comprehensive manual with the usual humerous cartoons depicting pre-computer hardware and many tips and wrinkles. In fact there are so many utilities on this diskette that the CATALOG listing would be too big for this page so I have decided to discuss the various utilities under common headings .

FILE.MOVER

This is a utility that is more compact than Apple Filer on your ProDOS utilities diskette and frankly does a better job. However, if you are used to the Apple Filer program you'll have to learn the new format of the FILE.MOVER. The main menu is in figure (1) and will give you a sample of its versatility:

To run FILE.MOVER simply enter: `FILE.MOVER` from Applesoft or:

```
12345 PRINT CHR$(4) "-
FILE.MOVER" : REM FROM WITHIN
A PROGRAM
```

FILE.MOVER will also work without the need to be in Applesoft since it is a system file and will be automatically invoked if it is the first SYStem file after the ProDOS file on the disk.

When using this product remember that you are usually working with VOLUME or DIRECTORY (A). This is quite a pleasant way of working when you get used to it but experiment first with none important diskettes just in case you forget to eXchange (A) for (B) before you FORMAT a diskette. Better still write-protect any diskette you wish to copy! FILEMOVER.SETUP can be used to customise FILE.MOVER to copy 5.25" diskettes with up to 40 tracks. Although not stated in the manual the program successfully recognises 3.5" diskettes and formats them correctly.

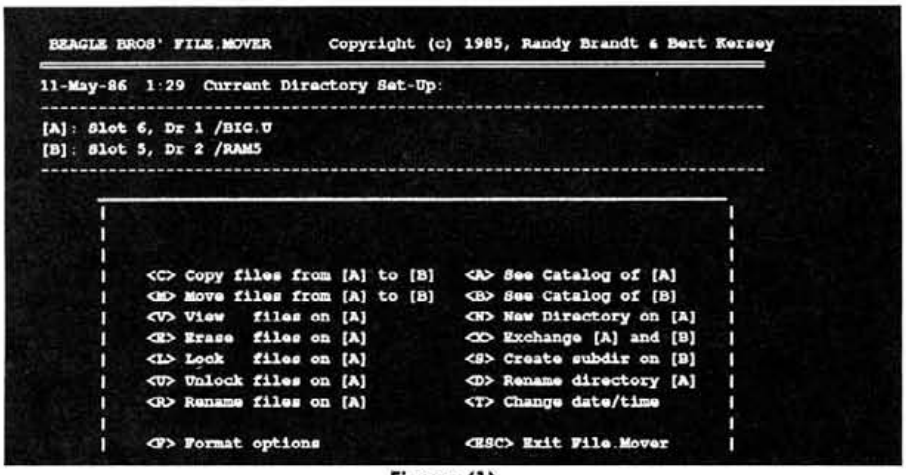


Figure (1)

CRT.WRITER

CRT.WRITER could be described as a 'screen Processor' since it is a wordprocessor that works only on a single 80 column screen. Because of this it is a WYSIWYG word processor, that is :- what you see is what you get. CRT.WRITER has all the features that you would expect of a good word processor. You can make a hard copy of the screen at any time and this feature is useful for making labels etc. Screens can be saved to diskette for later editting or for use in your programs where they can be loaded from within an Applesoft program as follows:-

```
12345 PRINT CHR$(4) " - NAME"
```

You may also edit screens that you have saved with the SAVE.80 utility described below.

KEYCAT80

This is a file menu program to enable one to run any program from a diskette with but two keystrokes. It actually produces a file called MENU which resides on the /RAM directory. If /RAM cannot be found MENU is stored on the diskette. The MENU can be recalled by pressing control-reset. This program is quite easy to use.

Ampersand utilities

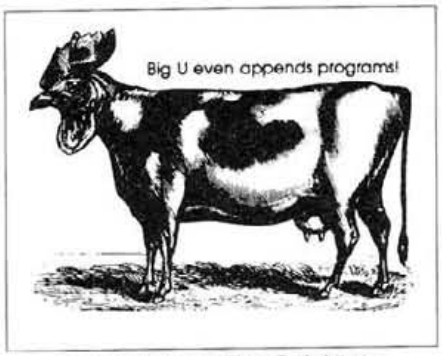
These programs can be installed at any time but only once. Once installed HIMEM: will be dropped below them to protect them. These utilities provide extra ampersand commands for Applesoft programs.

APPENDER

From Applesoft) prompt type - APPENDER to install. &STORE will hide the current Applesoft program. You can then load another Applesoft program. By typing &RECALL the hidden program will be appended providing that all the lines in the hidden program are larger than the last program loaded.

DUMP.80

When installed this feature will allow you to send the current 80 column screen to the printer. Just type &POP at the Applesoft) prompt or from within a program. This is like the open-apple-H command from Apple-Works.



From the Beagle Bros Catalogue

DUMP.40
Same as the DUMP.80 but for 40 column screens.
INPUT.80
When installed this utility gives you a new command &INPUT which allows strings to be input which contain commas or colons.
INPUT.40
Used when you are in 40 columns.
REM.OVE
This is a useful facility to strip all the REM statements from your Applesoft programs to shorten them and increase their speed of operation. Just type &REM after installation.
REM.OVE.128
Same as above but saves the original program to /RAM before stripping the REM statements.
SUPER.POKE
This is a program to allow sequences of numbers to be poked into memory

New COMMANDS

COPY
This is invoked by -COPY or of course from within a program by the usual method. Once installed it is very useful for transferring files from one directory to another either from the keyboard or from within a running Applesoft program!

```
COPY /DISK/PROGRAM ,
/RAMDISK/ANYNAME
```

This works directly from the keyboard.

```
10 P1$ = "/DISK/PROGRAM"
20 P2$ = "/RAMDISK/ANYNAME"
30 PRINT CHR$(4) ; P1$ + "," +
P2$ : REM
```

from within a program.

COPY will not overwrite an existing file of the same name and gives an error message and then stops. That's a pity because you might actually want to overwrite the existing file. COPY should give you the choice - this is a bad feature. It also appears that COPY does a 'garbage collection' to make the maximum possible copy buffer. Unfortunately this almost always adds 2 seconds to the copying process. I still use COPY however, because its very useful!

COPY.1
This is for one drive copies.
XLIST
You install XLIST by entering -XLISTER. Once installed XLIST works just like LIST except that it produces nicer listings. Hard copy can be achieved by entering a * after XLIST. EG.
XLIST
XLIST * 100-12345
XLIST 200-
XLIST *-100
Here is a sample :

```
21      FOR T=0 TO 50
       :   PRINT "XXX"
       : NEXT
       : IF A=6 THEN S=5
*      : Y=8
*      : STOP

54      END
```

HEX
This is a suite of commands to allow hex/decimal/binary conversion memory disassembly and more.
EST
Produces three new commands :
ERASE which is like FP in Dos3.3
SPACE gives the free space on the last drive accessed
TIME prints the time
These are just a few of the new commands and in my opinion the most important.

Utility programs

BEEPERWORKS
This is a program that will modify a copy of your AppleWorks startup diskette (versions 1.1 & 1.2 only) to change the pitch and tone of the beep!
BIGLINER
Lets you change the highest numbered line in your program to 65535 an illegal line number that does not affect the running of your program. However, the line cannot be deleted normally. This is a useful place to put your copyright.
CAT.DATER
This is a program that modifies the CATALOG routine so that the current data is printed at each CATALOG or CAT.
CAT.STEPPER
Allows you to specify where the CATALOG will pause during a listing.
CAT.FIXER
This program modifies the way in which CATALOG listings appear.

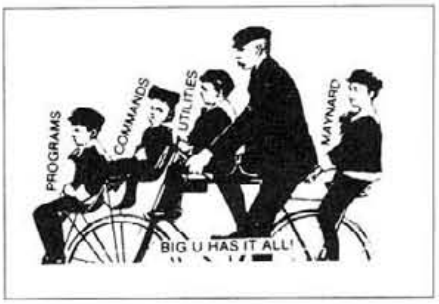
Many options are available such as a smart CATALOG where the screen is automatically set to 80 columns when it is required. Also listings to the printer can be set to more than one filename per line.
DATE.SET
Is useful to set the date/time if you don't have a clock.

DISK.COPY.MORE
This is an enhancement for the DISK.COPY program on the Beagle Bros. EXTRA K diskette.
ERROR.EDITOR
This is a program that allows you to change the ProDOS error messages.
RAM.SAVE
Dumps all the files in /RAM onto a diskette.
RAM.LOAD
Takes all the files from specified diskettes and loads them into /RAM. Loading takes place at 5K per second.
RAM.SETUP
Configure program for the above two programs.
RENEW
Have you lost your Applesoft program after entering NEW. Well just type :- -RENEW to get it back!!
RUN.COUNTER
This is a program that can be appended to your programs so that the date of the last time it was run and the total number of times it has been run will be printed each time.
SAVE.40
This program will save a 40 column screen to disk which is compatible with CRT.WRITER. You may retrieve the screen at the Applesoft) prompt by entering -FILENAME or 12345 PRINT CHR$(4) "-FILENAME": REM FROM PROGRAM
SAVE.80
Same as above but for 80 columns.

After all this there is a comprehensive list of all the ProDOS commands that can be executed from Applesoft, some I'm sure that you haven't seen before!!

In conclusion Beagle Bros. have done it again! There is such a plethora of utilities on the diskette that there is sufficient to make the diskette excellent value for almost anybody who purchases the product.

The BIG U is available from MGA MicroSystems of Tenterden who were kind enough to loan the package for review.



From the Beagle Bros Catalogue

News Bytes

A roundup of news by Jim Panks

Drawing on the IIGS

The latest package for the Apple IIGS is TopDraw from StyleWare.
TopDraw is a mouse based, object oriented, drawing program which supports the Laserwriter and the Imagewriter II. Designed to be used on a minimum configuration of 512k RAM it allows the user to define objects and then move, group, seperate, reshape, resize and fill with a variety of shades and colours. Objects or shapes can be flipped, rotated and locked and can contain a choice of 16 colours selected from a palette of 4096.

Price: $99.95
Contact: Styleware Inc.
5250 Gulfton, Suite 2E, Houston, Texas

WORM Drives appear!

The latest technology is now available at a price. The going rate for a SCSI WORM drive is about £10,000.
You get 30 Gigabytes of storage and unless you are a very large user it should take some time to fill the disk.
Don't hold your breath for prices to drop just yet as it is expected to take another two years before mass production brings the price down.

More on the Mac II

More 1.1c has been introduced for the Mac II. It is an integrated ideas processor and presenter, and it makes good use of the colour facilities of the Mac II by letting the user to colour the backgrounds, text and scroll bars to make the display much easier to read. It supports simple outlines, tree charts and bullet diagrams, and can have multiple files open at one time allowing cut-and-paste between them.

Price: TBA
Contact: Your Apple Dealer

CP/M on the Mac !

For those who feel they must have 'BDOS error on B:' messages on their Mac, Abaton Technology have the solution. It is a 5.25" drive with a built-in CP/M Z80 processor which can be attached to the Mac, and can run programs under CP/M 2.2, or can be used as an import/export device using IBM, CP/M or UNIX disks.

Price $695
Contact: Abaton Technology,
7901 Stoneridge Dr.,Suite 500,
Pleasanton, CA

PageMaker 2.0 soon!

Aldus (UK) announced at the MacExpo in Rotterdam that the new version of PageMaker was shipping in the U.S. and would be ready at the end of May for the U.K.
PageMaker Registered Users should be contacted with details in the next few weeks.
The reason for the delay is purported to be so that all the bugs can be eliminated, however Industry Watchers suggest it was because IBM wanted the P.C. version out pronto.

Price: £450.00 + VAT
Upgrade: £60.00 + VAT
Contact: Aldus (UK), Craigcrook Castle, Edinburgh EH4 3UH.
☎ 031 336 1727

New Bank Street Writer

Bank Street Writer from Broderbund has been updated to work on the enhanced //e, //c and GS. It features the text editor, plus 60,000 word spelling corrector, on-line thesaurus, and pull down menus.

Price TBA
Contact: TBA

New Wordprocessor

FullWrite Professional is a word-processor for the Mac with all the normal facilities. In addition it has desktop publishing capability with advanced features such as kerning, variable leading, word-wrap around irregular margins and can handle multiple column styles on the same page.

Price: $215
Contact: Ann Arbor Software.
2393 Teller Rd., Suite 106, Newbury Park, CA 91320.

New Assembler for IIGS

News that Micol Systems of Canada will be releasing a new 16 bit assembler for the GS in the next month should please all those who want to get into the GS. It will have a new full feature editor and will give GS users a valuable tool in what is still a very new market.
Apple2000 will be distributing it in the U.K. No price has been announced yet. But as usual members will be offered a special price and this will reflect the true exchange rate. Look out for a review in the near future by our in-house boffin Dave Ward.
Contact: Apple2000, P.O.Box 177, St Albans, Herts AL2 2EG.
☎0727 73990

Apple put colour into MS-DOS

Apple (UK) added colour to the drab uniformity of the Lotus World Exhibition in London recently. At the event Apple took a large stand to show off the new Macintosh range and especially the way in which Apple machines connect to the MS-DOS environment. Apple have reported that the first dip into the MS-DOS community was a success and that many interested parties came from the corporate sector.

New SCSI drive.

Jasmine have been known for drastically cutting the price of hard disk technology - now they are selling a new Verbatum - Kodak drive that uses what looks like a large version of the 3.5 inch floppy.
Holding some 10 megabytes of information the new drive has taken nearly five years to perfect and it appears to work just fine.
The disk is removable and the media will cost about £60 each, however the speed is reasonable and some applications spring to mind.
Removable media makes it easy to have security and also allows the use of a library of disks for specific tasks.
This is brand new technology at a reasonable price from a company that has a good reputation for quality.

Price: About £1200
Contact: MacEurope are Jasmine Distributors in the U.K.

Newspaper Baron gets his own Mac

Eddie Shah of 'Today' fame has now received his own personal Macintosh SE. Mr Shah is one of the biggest users of Macintosh in the DTP field and from reports we understand that his system has recently been enlarged.
Hopefully we will be able to obtain a report of the 'Apple Today' relationship in a future issue.

New MegaScreens

Thames Valley Systems have announced two new models in the MegaScreen range. The MegaScreen II provides a PAL video output and has a maths co-processor option.
Other enhancements include a re-engineered interface board and new software.
The new MegaScreen SE is designed to plug directly into the SE's expansion slot. Both are 19.5" high resolution screens and they cost £1,995 + VAT.
Contact: Thames Valley Systems
☎0734 581829

Vendors are invited to send details of new products for inclusion in our News Bytes Item.

Share a Modem on AppleTalk

Infosphere have introduced the first modem server for AppleTalk networks. Called ComServe, it is the only software on the market to provide terminal communications to Macintosh Loacl Area Networks. Macintosh Users can now share modems and other serial devices over AppleTalk for a fraction of the cost of additional equipment. Comserve can be used with MacTerminal, Microphone, SmartCom, and AppleLink and supports Hayes compatible modems at speeds from 300 to 9600 baud.
The cost is $295 per server and it will be available from Apple Dealers.

Kawasaki and Knaster leave Apple.

Kawasaki, Guy
To: User Groups

The time has come for me to leave the Apple nest and fly on my own. I am starting a company called Acius (pronounced ay-see-us) to publish Silver Surfer and other Macintosh applications. Scott Knaster, the Manager of Developer Technical Support, is joining me.
Acius will be a philosophy not just a company. Our goal is to improve the productivity of our customers and to make our customers into fans.We love Macintosh and want to do it proud.
I don't look at this as leaving Apple. It's a way to do an even better job now that Macintosh has great software, and my evangelism job is done.
Wherever I am, however, I will always bleed six colors.
Silver Surfer will be called 4th Dimension. It is the most powerful data base for any personal computer. It is a relational data base with a programming language and MacDraw-like graphics. If you've got some real hard-core data base users or SIGs, please let me know.
I've enjoyed working with you and coming to your meetings. I will always cherish my memories of working with user groups. I hope that someday you will allow me to visit your group and evangelize you on the Acius way...Regards,

Guy Kawasaki

The above is a message sent to User Groups by BBS. We will watch the outcome which could be interesting to Apple Users!

Join hands here comes Apple and P & P Micros

Apple and P&P Micro Distributors have formed a strategic alliance under which P&P will cease all direct sales to end users and instead rely on the Apple Dealership network.
As from April P & P re-organised and became a PLC company which just goes to show how well you can do in six short years. Congratulations to Pete & Pam Fisher.

Apple//e USA Style

Apple (USA) has launched an updated version of the //e for the American market, with a IIGS equivalent keyboard, and in the new platinum house colour.
An 80 column card, updated manuals and tutor software are included in the $829 price. The cost of interface cards to make it useable bring the total close to the $999 price of the basic GS which has interfaces built in.
It will not be available in the UK.

Charts Unlimited

Charts Unlimited from Graphware will produce flowcharts and organis-ational charts on any 64K Apple //.
It has a worksheet consisting of 123 columns by 90 rows in which to place text, flowchart objects, boxes and geometric shapes. The resulting chart can be printed on most dot matrix printers.
Price $49.95 from Graphware Inc, P.O.Box 373, Middletown OH 45042.
No U.K. Supplier known yet.

)(GS Graphic Tablet

Techex (UK) Ltd. are distributing the Kurta IS/GS graphics input system for the GS. This is a graphics tablet using a cordless pen, and is compatible with Paintworks Plus, Top Draw, GraphicWritor and other GS programs.
Price is £395 from Techex Ltd, Meriden House, 100 Hanger Lane, London W5 1EZ.

'Merlin help Apple Succeed'

Apple Dealer Merlin Associates is launching a new subsidary called Merlin Information Management Solutions. They will specialise in Macintosh vertical market solutions using the Omnis 3 Plus development environment.
Merlin will take on the labour intensive development work associated with producing bespoke software. The finished programme will be a ready to run application with full documentation. This should make it an easy task for Apple Dealers to sell a complete solution in highly specialised fields.
Contact Nigel Richards
☎ 0222 615437.

Silicon Valley leaves the Apple fold.

Apple have announced that they have removed Silicon Valley Computer Centre from the Authorised Dealer List and ordered them to cease trading as an Apple Dealer because of infringements of the Dealer Agreement.
Present customers need not worry about warranty problems as Apple have made arrangements for this to be covered.

DeskTop Marketing

Merlin Associates have selected Macintosh, Omnis 3 Plus and QWERTYphone to achieve total control of telephone activity via DeskTop Marketing.
DeskTop Marketing will capture name, address, telephone number and associated details via conventional keyboard input, or electronically from other computers using MerlinLink software.
This information is then stored in a specially designed Information Centre, that will allow Macintosh to search specific prospects and instruct the QWERTYphone to automatically dial the telephone number.
All actions performed by DeskTop Marketing are recorded in real time, providing up-to-the-minute analysis facilities.
Contact:Merlin Associates.
☎(0222) 615437

Germans ban computer simulation.

Silent Service an award winning simulation from MicroProse has been banned from general sale in West Germany.
Silent Service is a World War 2 submarine action simulation which can now only be purchased from regulated outlets such as sex shops.
The decision to outlaw the simulation, known as 'Das U Boot' in Germany has been made under legislation known as the Youth Dangerous Publications List. This law seeks to protect German youngsters from a range of products including pornography and any material likely to incite aggressive behaviour.
As a result MicroProse is to appeal to the German Authorities to re-think the policy of banning software under this act - and is even prepared to go to court.
I wonder what would happen to our old magazine 'HARDCORE' !!!!
Silent Service and other simulation software for the Apple II range is available from Microprose.
Contact: MicroProse
☎ 0666 54326

AppleCentre Waterloo opens.

The fifth London based AppleCentre has opened with the debut of the AppleCentre Waterloo at 70 Newington Causeway, London SE1.
The first initiative as an Apple-Centre has been the formation of the Apple News Graphics Group, designed for everyone with an interest in news graphics.
It is envisgaed that the Apple news Graphics Group will hold regular meetings at least four times a year. Some of the main functions of the group will be to provide an informal forum for meeting and discussion, presentations by experienced users, meetings with software developers and evaluation of the latest products.

New Mac games and utilities.

New Macintosh desk accessories, utilities, and games are now available from Apple dealers.
Ferrari Grand Prix (£60.89) A fast action Formula One Grand Prix simulator with multiple options for speed, gearing ratios, and the ability to design race tracks.
Bodettes Square (49.94) A border font for Postscript output which provides for a variety of border styles in grey or black.
Smart Alarms & Appointments Diary (£50.69) Two desk accessories - the first a powerful reminder alarm and the second an appointment diary with searches and printouts.
Desk Scene (£30.39) This allows the desktop to be customised with a scanned image or MacPaint generated art.
Grand Slam Tennis (£45.62) A tennis simulation featuring variable weather, racket types, skill levels and a choice of famous courts such as Wimbledon. Four tournaments are included.

DataFrame XP 40+40

Computers Unlimited have announced the introduction of the SuperMac Technologies DataFrame XP 40+40, a 40 Mb integrated SCSI hard disk/tape backup subsystem for the Macintosh Plus.
The DataFrame uses a 1 to 1 interleave to make it one of the fastest hard drives on the market with an overal speed increase of about 300% on normal hard disk units. for permanent archiving a removable 40 Mb cartridge back-up system is provided which saves data to a small tape. The hard disk and tape back-up appear on the desktop as icons and the software allows you to drag, delete and copy files just as if they were on a floppy. Tape functions include streaming backup which will save the entire contents of the hard disk at the fastest possible tape speed.
Contact :Computers Unlimited.
☎ 01-349-2395

~~SAMS~~-AppleCentre in the City.

March saw the opening of AppleCentre in the City, this is a division of SAMS of Wimbledon and is designed to give service to the City business community. Located near Ludgate Circus it is also in the old heart of the Newspaper Industry. Managing Director Max Wright seems to be getting it all right and his staff include some of the most informed in the trade.

AppleCentre Glasgow

The AppleCentre Glasgow has been formed by Bain Business Solutions and is situated in the Scottish Exhibition and Conference Centre in Glasgow. Bain have been dealers for some time and this is a giant step forward for Apple in Scotland.

Blyth Software drops Copy Protection.

Blyth Software have dropped copy protection on all single and multi user versions of Omnis 3 Plus in a move that affirms the rising status of hard disks.
The announcement coincides with the shipping of the latest multi user version (Version 3.24) which is compatible with AppleShare.
Nero Rad, Sales and Marketing Manager of Blyth told Apple2000 "We're dropping copy protection in response to our customer's needs. Many of our customers are sophisticated software users who value the support and service we offer".
All registered users and Omnis developers can upgrade to Omnis 3 Plus 3.24 free of charge by returning their program disks.

Mac Architecture wins CAD/CAM Award.

It's not only DTP that is winning awards for Apple equipment. Architects too are reaping the benefits of using the Macintosh as can be demonstrated by the fact that architects Leslie Fox Albin Partnership won the 1987 MicroCAD Achievement award at the recent CAD/CAM Exhibition.
The partnerships entry comprised a selection of designs and presentations prepared on a Macintosh with software such as MacDraft and Scheme 3D. A large proportion of the submission was connected with work on the St Lukes Hospice.
This is believed to be the first building in the U.K. to have been designed entirely on the Macintosh.

Latest Offerings from Computers Unlimited.

Spectrum: Ultra high resolution colour video card for the Mac II. Fully programmable and compatible with any high-res monitor with resolution up to 768 x 1024 pixels, the card will allow a display of 256 colours or levels of grey. PAL is also supported.
Prodigy SE & Prodigy Prime: Designed to add power to the Mac with ultra fast 16MHz 68020 processor, IMB Fast RAM, and many options including a 68881 maths co-processor. The upgrades can support upto 32MB RAM.
MacAccess: Connect Macintosh via AppleTalk to other computers, printers, modems and plotters. In fact anything with any RS 232 port can be accessed with simple transparent commands via the Chooser.
SuperLaser Spool: The newest, easiest, and fastest spooler for the Macintosh. Nearly all Mac applications work with it including PageMaker. Spooling is by softw-are and frees the Mac from long waits for the Laser. Recommended by the Editor when he can get his hands on one !!!!

AIRHEART

Roger Larcombe tries out the latest arcade action from Broderbund and loves every minute of it.

This really is the very latest in arcade game action from our friends at Broderbund, and is a superb program featuring stunning double hi-res colour graphics, three dimensional effects, high speed action and sound effects. It was written by Dan Gorlin previously known for his work on Choplifter, one of the best known games of its type for the Apple II range. Of course the double-hires graphics means that you need a minimum of 128K memory running on a IIe or IIc. The program has not been tested on a IIGS, but as far as I know it should not have any problems.

Airheart comes well packaged in the normal Broderbund way with an 8 page booklet detailing the story and giving instructions on normal play and strategy for those who get that far.

The story begins deep back into pre-history in the land of the sea, where a great overlord ruled. When the King of the sea found himself in a conflict he could not win, as a final gesture he used his remaining powers to safeguard his newborn son by placing him in a state of suspended animation in a glass dome hidden in the wildest wastes of the sea. The King's name was Marinus and these were his words :

"Our world was the sea and we ruled with fairness, but overcome in an unjust war, my infant son is all that is left and he is guarded with power and grace. He can only be saved by the strongest and bravest with the will to open the door. Robot defences stand in the way, so that only Airheart can discover the place".

These words have brought temptation to countless would-be heroes who have all failed, and somewhere over the sea the Prince still awaits held frozen in a state of suspended animation. Legend warns of the deadly robot defenses left by the King to ensure that the Prince can only be awakened by a true hero, fit to protect a royal babe in a perilous world. This hero shall come, and he shall be called Airheart.

To prove yourself you will have to pilot the jet-sled and defeat ingenious defenses to bring the spirit guardians three proofs of fitness - the sword (strength), the Goblet (generosity) and the Harp (harmony). Only then will you have earned the right to the final furious battle, and only as the victor will you be able to awaken the sleeping Prince.

The vehicle upon which you travel the land of the sea is the jet-sled, which can travel both above and below the water: the advantage of being below is that the robot

...'a superb program featuring stunning double hi-res colour graphics'...

defences cannot harm you, though of course neither can you harm them - that would too easy! The sled has jets fired by one joystick button, and weapons fired by the other. Moving forwards and backwards alters the attitude of the sled and thus the firing trajectory of the weapons. At the bottom of the screen is a control panel including a compass, a clock and life, sled and treasure counters.

The game starts at the home island where the spirit guardians, by whom you are judged, set your task to retrieve the various magical items. After the instructions are given the guardians vanish leaving you to your fate with only bubbles emanating from the islands; shoot one of these to find the bright glimmer which will lead you to the island where the item is hidden. This is actually one of the difficult parts of the game especially if you only have a green monitor as the tiny winking glimmer moves very swiftly and changes direction irratically.

Once you arrive at the treasury island you have to defeat its robot defences before you can retrieve the item itself. You have to bring forth the robots by mavouvering the sled right up to the island and bumping into it, and hey presto out they leap. The robots come in 7 types - some cannot be touched without destruction, some throw out bubbles which on contact will envelope and suffocate you, some are even completely harmless - and you will have to defeat them all before they get you. When a robot is hit a small pod is released and you must manouver close to this to pick it up quickly or it will regenerate into a fully fledged robot again.

Again you bump the island and some more robots may appear, if not then you jump from the sled with your life support pack, slip it on your back and disappear inside the island shortly to reappear with the sword. Now you can return to the home island, again not an easy task, you can either hunt the sea for it or you can attack a green island, and once you defeat this island's defences you can bump it, whereupon it transports you back to base. Here the spirit guardians take the sword and send you on your next 'sortie'.

There are some rewards to gain if you wish on the return journey, if you come across a pattern of three glimmers near each other then passing through them all in quick succession will gain you an extra jet-sled for later, but beware, the glimmers are guarded by mini robots! The other thing to remember is the time you take to complete the game as this is the main factor in determining your score.

Each successive sortie requires you to defeat more robots than the last and the robots get fiercer too. After you complete the three tasks set by the guardians you will have the opportunity to take part in the final battle where you will have to defeat all 7 robot types together, ultimately to release the prince and earn yourself the name Airheart. Don't ask me what the final battle is like, I never managed to get that far.

In conclusion, this is certainly a great game from the most prolific high quality software house for the Apple // series that I know. The double hi-res graphics allow far greater detail in the three dimensional animation giving the wide variety of targets to shoot at in a single game program. It must be said however, that the game requires great skill in control of the sled which is a fairly unstable craft, and would just not be winable without a colour screen. I am sure all the arcade game fans will love it.

TASS TIMES IN TONETOWN

Graham Attwood and trusty IIGS, get to grips with the latest release from Activision and thoroughly enjoy themselves.

This an adventure unlike any other. Its weird and so are the people of Tonetown, but then of course you are just a stranger around here - in fact a tourist - and some of them do not like tourists! You will never get anywhere dressed like that and with that funny hair - very Jonboi Waltune, and we all know what happened to him! The sooner you get some proper TroppoWear clothes from the 'Tique and get Chaz to put a streak of Royal Blue in your hair the more UltraTone you will become with a better chance of surviving and finding out from the townsfolk where Gramps has gone.

You will get to meet Franklin Snarl quite regularly to start with (he is very fond of strangers), especially when you are dead - well just before actually! But then you have got your friend Ennio to help you along the way. Some dog this Ennio, star writer for the Tonetown Times the past five years.

If that makes any sense to you then you really are 'Tone and have obviously played Tass Times before.

This is a game which is released in versions for the **Amiga, Apple II, Apple IIGS, Mac, Atari** and **Commodore** but what is special is that each is carefully tailored to make the maximum use of the features of each machine.

...'uses super high-res colour graphics, animation, sound and the mouse.'

The IIGS version I have looked at uses super high-res colour graphics, animation, sound and the mouse.


TONETOWN TIMES

"All the News that's Tone to Print"

Tonetown, Downland, Over Edge

GRAMPS VANISHES

Franklin Snarl Linked to Mysterious Disappearance

A very strange but lovable Tonetown visitor, who calls himself Gramps, has recently disappeared.

Gramps was one of the only visitors who, in spite of his untasteful apparel, was well accepted in Tonetown. After visiting with several of Tonetown's most prominent citizens, like Stelgad of the Daglets, Flo of Flo's Party Supplies and Nuyu, editor of the Times, Gramps evidently wandered off on his own some where.

He was reported last seen around moonup, June 26, with the real estate magnate, Franklin Snarl.

"It seemed he was resisting some," said one witness who wished to be unnamed.

But Snarl denies these reports. "I never he'ard of the guy!" Snarl insisted.

Other citizens, however, have given glowing reports of the strange old visitor from another parasphere.

continued on page 4

Hometown Dogwonder Wins 6th Consecutive Ultra Journalism Award

Tonetown's own Ennio, better known as "The Legend" has done it again. He's won the Inter-Moonal Ultra Journalism Award.

This year the canny canine snapped up the prize with his investigative article about intra-dimentional travel through the a new invention called "The Hoop".

At great risk to his health, Ennio actually travelled through the hoop and back again to gain first hand knowledge of the device.

When you boot the disk it presents an opening screen, and plays continously a brilliant piece of synthesised music (Tass by the Daglets, of course), until you press a key when the game itself loads.

...'an intriguing game, excellently presented, and well worth the price'...

The first scene opens to the inside view of a cabin; the clock on the wall ticks noisily and the pendulum swings to and fro in time.

The screen area is divided into this Hi-res graphic scene which is shown on the left side of the screen, an area to the right displays 8 option icons, and along the bottom is presented the text description of the scene.

Commands are generally typed from the keyboard, but several standard operations are available on the icon area and are selected by clicking with the mouse; they include '**get**', '**drop**', '**hit**', '**look**', '**buy**' and '**enter**', and the two conversational commands '**talk to..**' and '**....tell me about...**'. When an item is got it appears on a bar above the text. There is also a direction indicator for your next move - North, East, South, West.

The game proceeds usually by trial and error, finding useful things, and meeting new people in each scene.

It is very important to address them by name if you want them to be helpful, but how do you know what it is?

Sometimes the answer is on the scene or in the text, but at other times you have to resort to reading a copy of *Tonetown Times* thoughtfully included in the package by Activision.

Without it you will not get far - well just as far as Franklin Snarl, and he will introduce you to the *Crocogators!*

You can save the game part-way through if things start to look dicey, and you can restart from there if it all goes wrong. You can save up to ten of these game versions, and it is wise to do so frequently, since the fatal mistakes may not necessarily have been in the last few moves.

This is an intriguing game, excellently presented, and well worth the price of £21.73.

Tass Times is available from MGA Microsystems.

Cirtech plusRAM & plusRAM-xtra

Two new 'home grown' memory cards are given the once over by Dave Ward .

When Apple Computer Inc. announced that they were defining a mass memory card for the Apple // series of computers Cirtech (UK) quickly introduced a 1 megabyte card (the Flipper) based upon the Apple standard and this was reviewed in earlier issues of Apple2000 magazine.

A megabyte of memory may seem an awful lot for many users when 256K would probably be adequate and less expensive. For instance a 128K Apple // system will give a desktop of just 56K with AppleWorks version 2.0. A 256K plusRAM on the otherhand will bring the desktop up to 244K which is sufficient; only the avaricious require the 1012K desktop obtained from the 1 megabyte plusRAM. Cirtech have addressed this as a gap in their product range and produced a 256K plusRAM memory expansion card based upon the Apple standard which is expandable to 1 megabyte. That would normally be the end-of-it but Cirtech have added quite a bit of 'icing'.

For the purpose of this part of the review we will treat the plusRAM-xtra card simply as a 1 megabyte plusRAM card ; we'll discuss the -xtra bit a little later on.

The plusRAM card arrives in a padded yellow box with a clear comprehensive User's manual and a single 5.25" diskette of support software to modify AppleWorks and allows Dos3.2, Dos3.3, Pascal 1.1,Pascal 1.2, CP/M 2.20B & CP/M 2.23 to use the plusRAM card's extra memory. The manual gives comprehensive details on the installation of the plusRAM cards, how to add more memory chips and troubleshooting problems.

The installation is relatively simple but Cirtech suggest that you may place the card in any of slots 1-7 on an Apple)(Plus , Apple //e or Apple IIGS, however there are some exceptions which should be noted:

❑ Slot 3 cannot be used in a European Apple //e if an 80 column card is installed in the auxiliary slot 3. You are also advised not to use slot 3 in an Apple IIGS.

❑ If you have an enhanced Apple //e it is advised that you place the card in slot 7 as it can be auto-booted from there.

❑ If you are going to use Pascal 1.3 you should place the FLIPPER in slots 4,5 or 6 so that Pascal 1.3 will recognise it as a Ram disk.

❑ In an Apple IIGS you may place the plusRAM card in 1-7 except slot 3. For slots other than slot 7 you must enter the 'control panel' to recognise your card. You can also arrange to boot from any slot in an Apple IIGS.

Once installed it is suggested that you might like to try out the self-test program on the card. However , this can be done at any time providing that the machine is in basic) prompt or monitor * prompt. The self-test erases all data from the plusRAM. The table below shows what you enter depending upon the slot plusRAM is in :-

SLOT	BASIC	MONITOR
1	CALL 49418	C10AG
2	CALL 49674	C20AG
3	CALL 49930	C30AG
4	CALL 50186	C40AG
5	CALL 50442	C50AG
6	CALL 50698	C60AG
7	CALL 50954	C70AG

Of course you must press 'return' after entry !

As the plusRAM cards are based on the new Apple standard for large memory expansion cards they should, therefore, be compatible with all future software unless Apple move the goalposts!

Adding more memory

This is a very easy operation and if you carefully read the manual before placing the chips nothing should go wrong. **This is important because the chips may not be placed where you think!** You can purchase 256K memory expansion kits directly from Cirtech (UK)

Using plusRAM with AppleWorks

No doubt many plusRAM purchasers will want the product to enhance the AppleWorks desktop to a more reasonable size. Cirtech have addressed this problem by providing an AppleWorks enhancement program suite on the reverse of the plusRAM support diskette. Since plusRAM works in an Apple)(Plus many users will want to take advantage of this to use AppleWorks on that machine. When you attempt to enhance AppleWorks you should only use a copy. For an Apple)(plus only AppleWorks version 1.3 USA can be enhanced to recognise the plusRAM card since later versions of AppleWorks use the alternate 64K which is unavailable on this machine. The manual lists the alternative keys you will require to use to simulate the special keys AppleWorks uses on the Apple //e. A shift key is essential and for those without one the manual clearly describes the mechanics of installing one.

It is necessary to carry out the enhancement procedure even if you are using an Apple //e or Apple IIGS with AppleWorks versions 1.3 or 2.0. Cirtech claim that this is necessary as the code in the AppleWorks interface to memory card is imperfect. Cirtech's enhancement program makes this interface nearer perfect! Full enhancement is essential if you are using plusRAM on an Apple IIGS and is a very good idea anyway because of all the extra goodies Cirtech have added.

❑ If the file you are about to save is too large to fit onto a single floppy diskette the autosegmenting feature prompts you to put in extra diskettes as they are needed. Note that you should have plenty of diskettes all with the same name to store the data. Also mark the diskettes so that you can later reload them in the same order.

❑ A very neat RAMcalc Resident Calculator pops up when you press closed-apple-C keys together. You

can move the RAMcalc Resident Calculator all over the screen using the arrow keys!

RAMcalc has many features that other pop-up calculators don't have and is extremely easy to use including :- Memory - Percentage % - Square roots - Exponents.

Exchange of display and last entry numbers are entered from the keyboard or keypad and arithmetical operators as you might expect to enter them:
Multipy : * X x
Divide : / D d

I'm sure you can guess the rest. Calculations are performed in the order that they are entered. When you are done just hit ESCape to exit back to AppleWorks. You will notice when you later recall the RAMcalc Resident Calculator that it was exactly the same as when you left it.

❑ A rather nice feature is available if you have an Apple mouse connected as you will then be able to move the cursor quickly around the screen. Also the button acts as 'RETURN' or ESCape.

We will now look at the way the plusRAM card works with the aforementioned operating systems:

PRODOS

Booting a Prodos disk automatically provides a formatted 'Ram disk' once you invoke a Prodos command such as LOAD or CAT etc. Its name depends upon the slot in which you placed the plusRAM card for example plusRAM card in slot 2 produces /RAM2. You can make your 'Ram disk' bootable by firstly formatting it using the FILER program from the Prodos Users Kit and then copying across the file PRODOS and any others that are necessary.

To boot the 'Ram disk' type PR#4 (plusRAM card in slot 4) just like you would if you had a Disk)(in that slot. Incidentally if you boot another Prodos disk (except by switching off the machine) you will find that the programs are still there!

DOS 3.3

After booting a Dos 3.3 disk you can activate two 'Ram disks' (assuming that you have a megabyte card) by issuing the command IN#4 (plusRAM card in slot 4) either from inside a program or directly from the keyboard. The two 'Ram disks' can be accessed by appending ',S4,D1' or ',S4,D2' to the end of Dos commands. The size of each 'Ram disk' is just less than 400K because Dos 3.3 cannot support anymore.

When you activate the 'Ram disks' by typing IN#2 (plusRAM card in slot 2) only a very slight patch is applied to RWTS routine in Dos so that it will also work with most of the fast commercial Dos 3.3 variants and also Dos 3.2. The approximate times to load and save 50 sector BASIC files are listed below:

Dos type	Load Disk	Save Disk	Load RAM	Save RAM
Dos 3.3	14	17	4	5
Diversi-Dos	4.5	5	0.4	0.5
FastDos	4.5	5	0.4	0.5
ProntoDos	4.5	5	0.4	0.5
SpeedDos	4.5	5	0.4	0.5
Dos 3.2	10	10	4	4

Disk operating systems which move themselves into the Language card to provide more user memory cannot be booted directly, because, the patch will be applied in the wrong place. However, simply boot the 48K version and install the 'Ram disks' and then move Dos ! I tested 64K Dos 3.3 and 64K Diversi-Dos and both appeared to work normally.

The fact that Dos 3.3 and Dos 3.2 only vary very slightly is shown as follows: Boot up a Dos 3.2 Master disk (remember how) and install the 'Ram disk' then save a few BASIC files to it. Boot up a Dos 3.3 Master disk (except by powering off and on) and install the 'Ram disks'. You will find that not only are the files preserved but you can load them !!

You can make the 'Ram disks' bootable by Brunning the file FLIP on the plusRAM support disk and then moving the appropriate files onto the 'Ram disK'. Note that a 256K plusRAM card produces a 240K RAM drive.

PASCAL

Pascal 1.3 is fully supported and will produce a 'Ram disk' the first time you access it. You can presumably produce a bootable 'Ram disk' by formatting it then transferring over the appropriate files.

Pascal 1.1 and Pascal 1.2 require you to copy over three files from the plusRAM support disk onto the Pascal boot disk. The files for Pascal 1.1 differ from those for Pascal 1.2 ; the manual clearly explains the procedure. Pascal 1.1 when booted will automatically format a 'Ram disk' volume #10 whereas Pascal 1.2 will format volume #20. You can't unfortunately make a 'Ram disk' bootable under Pascal 1.1 and Pascal 1.2 because they must be booted from slot 6.

CPM

CIRTECH claim that their own CPM Plus system automatically produces a 240K 'Ram disk' on a 256K plusRAM card, on booting. However , CPM 2.20B and CPM 2.23 require you to copy a file from the plusRAM support disk to your CPM boot disk.

After this file FLIP.COM is executed the 'Ram disk' will be installed. The 'Ram disk' is accessed as Drive D: on CPM 2.20B (56K) or Drive F: on CPM 2.23 (60K).

plusRAM-xtra

The plusRAM-xtra card is only available as a full megabyte card. It is in reality a new name for the Cirtech Flipper card which we have reviewed in previous issues of Apple2000 magazine.

The plusRAM-xtra card is a slightly smaller than the Flipper card and the firmware on board has been enhanced. The product is supplied with a plusRAM user's manual plus a RAMDESK Manager Supplement manual. The main side of the plusRAM support diskette has the RamDesk Manager software.

We last reviewed the Cirtech Flipper card in February 1987 and would suggest that interested readers refer to the review on page 41 and also the previous review of the original Flipper. However, here is a resume :-

When you boot the plusRAM support diskette supplied with the plusRAM-xtra card a utility is executed that allows you to produce a RamDesk Startup Diskette on either a 5.25" diskette or a 3.5" diskette.

During booting of the RamDesk startup diskette the program determines which type of machine you have and will produce one of two RamDesk Managers. You will be requested to make a 'one-time' choice of how the memory in the plusRAM will be apportioned.

The little table on the next page shows the available options:

Continued on page 18 ☛

Option	Size of Workarea (in kilobytes)				Number of Workareas
1	984				1
2	492	492			2
3	328	328	328		3
4	246	246	246	246	4
5	492	246	246		3
6	738	246			2

On enhanced Apple //e and Apple IIGS computers a graphic RamDesk Manager is produced which utilises the double hi-res graphics producing Macintosh 'pull-down' menus with mouse control.

The mouse operation is so easy ; just point and 'click'. It's child's play ; literally! One point, however, if you click the solid-apple in the top-left-hand corner you will pull down a menu showing the 'short-cut' commands (utilising the open-apple and closed-apple keys).

If you don't have a mouse you can use keyboard commands. First press escape and then use the horizontal arrow keys to choose the menu. Vertical arrow keys can then be used to pick the option you desire in the menu.

On other machines a text version of the RamDesk Manager will be loaded. This can also be loaded into the aforementioned two machines if the space bar is smartly pressed immediately on booting. After choosing the number of areas you will be presented with a text version of the pull down menus in forty columns :-

Areas Disk Activate Restore Backup Clear

You can choose the menu using the horizontal arrow keys and pressing return pulls down the menu. In the menu the same arrow keys allow you to select.

When you have chosen a workarea its name, size, free space, operating system and catalog will be shown! you can even scroll through the catalog with < > or vertical arrow keys.

Most users of the RamDesk Manager will want to 'FLIP' between areas and/or perhaps use the main memory of the Apple whilst retaining the option to quickly return to their application(s) in the plusRAM.

Therefore at the start of a session the workarea(s) will need to be formatted and have files uploaded. Also at the end of the session some portion of each workarea will need saving or backing-up.

Backing-up is extremely important because of the volatility of RAM memory. The RamDesk Manager contains utilities to enable users to make back-ups (memory images) of their workareas very quickly onto 5.25" or 3.5" diskettes. These memory images are called 'FLIP' disks and can be used to restore workareas just as quickly. This technique has enabled CIRTECH to keep the cost of the product down and allow users to make these needed back-ups. It's also about the best method - just consider the alternatives.

During the evolution of the Flipper to plusRAM-xtra Cirtech have taken pains to improve the firmware and RamDesk Manager software and remove any minor bugs that have appeared. In fact the two minor problems reported in our February review have been dealt with.

I must say that I was , initially, a little confused by the name plusRAM-xtra since that name does not really describe what it does. A few HOTLINE enquirers have also alluded to this. So plusRAM-xtra is really an enhanced Flipper with a better than 40% price reduction!

Although I appreciate the reasons for the name plusRAM-xtra which is consistent with other Cirtech RAM cards. I feel that the name Flipper ought to appear somewhere.

You may know that Cirtech and Apple2000 have an arrangement whereby members of Apple2000 may purchase 256K plusRAM cards for £80 + £2 + VAT. It occurred to me that the product must be made in Greenland and distributed by reindeer at that price. But no, they are just designed and manufactured by Cirtech in Scotland and are available all year round!

Apple2000 have nominated Cirtech as **'Recommended Dealers'** because of the good service they give **Users.**

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Things are Looking Up

Tom Wright demonstrates a practical application for some little understood Spreadsheet functions.

Many businesses successfully use spreadsheets as a substitute for purpose designed software. This approach offers several advantages one of which is that software costs can be held down, another is that user training costs are often minimised. Unfortunately minimising training costs often results in very limited use being made of some spreadsheet facilities.

LOOKUP tables can be used by most people and provide a method of reducing typing time on repetitive applications. LOOKUP also helps to avoid those awful occasions when it is realized that a problem solution is flawed because a variable wasn't changed.

The LOOKUP function is illustrated in the following example for anybody who wants to find out what they have been missing. Although the example produces data for three simple Production Control areas, the function can obviously be used for many more and extended to cover stock control, ordering machine loading, etc.

THE EXAMPLE

For illustration purposes I am assuming that we have a manufacturing company which produces a range of 4 different Wozlet assemblies. As the Manufacturing Manager we need to be able to quickly estimate the implications of sales enquiries in terms of time required for production to meet the requirement.

Some of the information that we will want to have includes :

(a) How many production operators would be required.
(b) What is the implied volume of assemblies per working shift.
(c) What is the material handling task in terms of volume of pallets.
(d) At what sort of intervals during the working week will we require transport to take finished assemblies to the customer, or storage.

For this exercise I am assuming that operation capacity is constrained only by the number of operators available, although in practice other constraints would also apply.

I am also assuming that a production operators working week is 39 hours in length, consisting of either 5 day shifts or 4 night shifts. With Monday to Thursday day shifts being 8 hours in length, and Friday day shift being 7 hours in length. Night shifts would each be 9.75 hours in length.

For the benefit of anybody who is just starting out with spreadsheets, the following 3-part listing takes the form of :

(a) column reference across the t op of each part.
(b) row references down the L.H.S of Part One of the listing.
(c) row references down the R.H.S of Parts Two and Three .

CELL references used in the text (eg I5) identify the location of the CELL in which information is to be entered (eg CELL I5 is where the required assembly type is entered).

In addition to the LOOKUP function the example also illustrates on of the 'safest' ways of using spreadsheets, Ie group all cells which require manual data entry into an easily identified and observed area of the sheet. All manual entry on the example is done in cells I3 to I8 inclusive 'assuming that none of the data in the LOOKUP tables requires updating). The manual entry area is enclosed by exclamation marks.

One area of the example which includes terminology that may be unfamiliar to some readers is columns A to N, rows 8 & 9. 'Working Pattern' refers to the Wozlet company policy for Relaxation Allowances (see BS 43025, BSI Glossary of Terms). 10% Relaxation Allowance is included in the example.

The example was originally prepared on a Flashcalc spreadsheet then printed to disk as a text file so that it could be transferred into the Appleworks Word Processor. When entered onto a spreadsheet Part Two will be to the R.H.S of Part One, and Part Three to the R.H.S of Part Two.

Why did he do it on Flashcalc if he was going to use Appleworks ? if Flashcalc provided the same size matrix as Appleworks I would never use the Appleworks spreadsheet, it's crude compared to Flashcalc (personal opinion folks).

To enter the example onto your own spreadsheet simply start with a blank spreadsheet and follow the cell references. Don't forget to set the spreadsheet to manually intiated Recalc before starting to enter the example, or to set it back to Auto-Recalc when you're done, unless you prefer to leave it set at manual (eg /GRM, /GRA, Shift-!).

As a point of interest one of the strengths of LOOKUP is that the function will literally choose the correct value from a matrix. Drawbacks include the fact that the table (range) musn't contain labels as they would cause innacurate results; another is that values in the table must be in ascending order and in the same row or column.

On occasion these problems can cause difficulties with the layout of completed spreadsheets which sometimes results in the use of CHOOSE, or IF- THEN-ELSE being more appropriate to the users need, given time we'll have a look at those functions at some time in the future.

The full spreadsheet layout is displayed on Page 22

O.K so that's what the example will look like when it has been typed onto the spreadsheet, now comes the nasty bit. You can enter the text to suit yourself really using the above as a guide for positioning, values and formulae must however be entered in the cells listed below if you expect the example to work first time. By the way, I am no mathematician ! you may well decide that there are more elegant expressions than the ones that I have used.

Being bone Idle by nature I am only listing cell information for those cells which will contain values or formulae.

LOOKUP TABLES

CELL	CONTENT	DESCRIPTION
P3	1	Table reference for no. of type 1 assemblies per pallet.
P4	2	type 2
P5	3	type 3
P6	4	type 4
Q3	130	Number of type 1 assemblies per pallet
Q4	1092	type 2
Q5	2072	type 3
Q6	13	type 4
P8	1	Table reference for no stop for rest effective hours
P9	2	" " " stop for rest effective hours
Q8	39	Effective hours no rest stop
Q9	39/1.1	Effective hours stop for 10% rest
P11	1	Table reference for 6 pallets per lorry load
P12	2	10 pallets per lorry load
P13	3	16
P14	4	8
Q12	10	ditto
Q13	16	ditto
Q14	8	ditto
P21	39/1.1	Effective hours per week of day shifts, stop for rest
P22	39	, no rest stop
Q21	8/1.1	Effective hours per day shift, stop for rest
Q22	8	, no rest stop
S21	39/1.1	Effective hours per week of night shifts, stop for rest
S22	39	, no rest stop
T21	9.75/1.1	Effective hours per night shift, stop for rest
T22	9.75	, no rest stop
P24	39/1.1	Effective hours per week of day shifts, stop for rest
P25	39	, no rest stop
Q24	7/1.1	Effective hours per Friday day shift, stop for rest
Q25	7	, no rest stop
P28	1	Table reference for 40 units per hour, per operator
P29	2	420
P30	3	850
P31	4	20
Q28	40	Capacity per hour, per operator
Q29	420	ditto
Q30	850	ditto
Q31	20	ditto

nb., following initial entry table data only requires updating if a new type of assembly, pallet, lorry is introduced. A change in Relaxation allowance would also require an update, as would revised operation capacity.

MANUAL DATA ENTRY BLOCK

I3	81120	Enter the total volume required for sales enquiry
I5	4	Enter the assembly type required by sales enquiry
I6	10	Enter target time for completion of enquiry
I8	1	Enter preferred working pattern

nb., calculation of the implications of a sales enquiry is done simply by entering the above four numbers, or others of your choice.

CALCULATED DATA

LOOKUP(I5,P11...P14)	Refers to required assembly type, then selects number of pallets per lorry load from table.
LOOKUP(I5,P3...P6)	Refers to required assembly type, then elects number per pallet from table.
LOOKUP(I5,P28...P31)	Refers to required assembly type, then selects capacity per hour from table.
LOOKUP(I8,P8...P9)*2	Refers to selected working pattern, then selects total available hours from table.
I22 (I20*I21)	Weekly capacity with one operator
I24 (I3/I22/I6)	Number of operators req'd by target time
LOOKUP(I21,P21...P22)*I24	Gross volume produced
LOOKUP(I21,S21...S22)*I24	
LOOKUP(I21,P21...P22)*I24	
LOOKUP(I21,S21...S22)*I24	
LOOKUP(I21,P21...P22)*I24	
LOOKUP(I21,S21...S22)*I24	
LOOKUP(I21,P21...P22)*I24	
LOOKUP(I21,S21...S22)*I24	
LOOKUP(I21,P24...P25)*I24	
SUM((I31...I43)	
J31 (I31)	Cumulative volume
J32 (J31+I32)	
J34 (J32+I34)	
J35 (J34+I35)	
J37 (J35+I37)	
J38 (J37+I38)	
J40 (J38+I40)	
J41 (J40+I41)	
J43 (J41+I43)	
L31 (I31/I13)	Number of pallets loads produced
L32 (I32/I13)	
L34 (I34/I13)	
L35 (I35/I13)	
L37 (I37/I13)	
L38 (I38/I13)	
L40 (I40/I13)	
L41 (I41/I13)	
L43 (I43/I13)	
SUM(L31...L43)	
N31 (L31/I11)	Number of lorry loads produced
N32 (L32/I11)	
N34 (L34/I11)	
N35 (L35/I11)	
N37 (L37/I11)	
N38 (L38/I11)	
N40 (L40/I11)	
N41 (L41/I11)	
N43 (L43/I11)	
SUM(N31...N43)	

continued on Page 22

<- PART ONE -> <- PART TWO -> <- PART THREE ->

Required Volume = 81120 U.P.

Assembly type = 4

TARGET TIME = 10 WEEKS

Working Pattern = 1 (1 = no stop for rest)

(2 = stop for rest)

Number of pallets per lorry load = 8

Number of assemblies per pallet = 13

type 1 ASSEMBLY
type 2 ASSEMBLY
type 3 ASSEMBLY
type 4 ASSEMBLY

1	39	Available hours p er weekly working pattern.
2	35.45	Available hours p er weekly working pattern.

1	6	No. of pallets pe r lorry load
2	10	No. of pallets pe r lorry load
3	16	No. of pallets pe r lorry load
4	8	No. of pallets pe r lorry load

AVAILABLE HOURS PER SHIFT

	DAYS	NIGHTS
	35.45 7.273	35.45 8.864
	39 8	39 9.75
	35.45 6.364	
	39 7	

Operation Capacity = 20 U.P.H. PER OPERATOR

Available Working Hours per Week = 78 (Dayshift + Nightshift)

Weekly Capacity = 1560 with 1 operator.

Number of operators = 5.2 to complete order in Target time.

	GROSS VOLUME PER SHIFT	CUM VOL	No of Pallets	No of Lorry Loads
Monday DAYSHIFT =	832	832	64	8
NIGHTSHIFT =	1014	1846	78	9.75
Tuesday DAYSHIFT =	832	2678	64	8
NIGHTSHIFT =	1014	3692	78	9.75
Wednesday DAYSHIFT =	832	4524	64	8
NIGHTSHIFT =	1014	5538	78	9.75
Thursday DAYSHIFT =	832	6370	64	8
NIGHTSHIFT =	1014	7384	78	9.75
Friday DAYSHIFT =	728	8112	56	7
WEEKLY TOTALS =	8112		624	78
ORDER TOTALS =	81120		6240	780

1	40	= No. per hour ca pacity PER OPERATOR
2	420	= No. per hour ca pacity PER OPERATOR
3	850	= No. per hour ca pacity PER OPERATOR
4	20	= No. per hour ca pacity PER OPERATOR

Wozlet Company

Analysis of Product Movements

Prepared on AppleWorks Spreadsheet by
Tom Wright

PaintWorks Plus

The first package brought out for the IIGS is evaluated by William Watson.

I was pleased to be loaned this program from MGA Microsystems as it was the first commercial piece of software that I had seen for the Apple IIGS. I was disappointed to find that the sample pictures which had appeared on earlier beta test/demo versions called GSPAINT had been omitted.

PAINTWORKS PLUS is a package which allows you to create colour drawings which may be saved to disk, incorporated in other programs or dumped to your printer. You are supplied with a single 3.5" disk and a manual of 150 pages.

The disk is **copy-protected** and does not therefore allow you to back it up as a safeguard against loss or damage. No mention is made on how to obtain a back-up copy. Presumably because of its copy protection it is not possible to put the program up as a Ramdisk or to a hard drive.

The total package is 488k long and therefore you will need at least 512k of memory storage. It takes about 90 seconds to load.

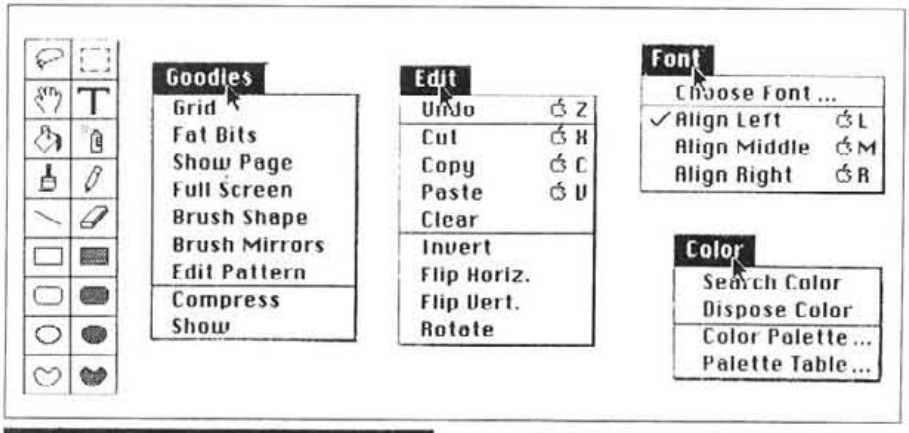
The program is very user friendly and good results are obtainable by trial and error but reading the manual first is definitely recommended as many features would be unlikely to be found without doing so. The manual is spiral-bound, well produced and easy to read.

On-screen options

PAINTWORKS PLUS is mouse-driven and uses standard pull down menus. There are 16 colours you may use in each picture you produce - selectable from a palette of **4096 colours**. It is possible to prepare a number of screens and animate them. Screens are comp-ressed to allow for storage on disk.

During drawing you have only a part of the page presented to you as a canvas and you can use a hand icon to move the 'paper' around. Images or part pictures may be moved around the total canvas with ease.

A **clipboard** is available for cutting and pasting from one picture to another but this is limited to just one image at a time. However you can create a picture to include a number of oft-used images or designs.



Pull-down menu's & Tools

Drawing

One can draw freehand but the beauty of all such graphics packages is the ability to use ready made tools for producing pleasing results. There are a number of shapes such as circles and rectangles, both filled and hollow, to use. Sixteen patterns per picture are provided and these may be edited to suit your needs. During editing you may also include colour in your patterns. New patterns are saved with your picture so that they may be used for future work.

A useful feature is the **lasso** option which will allow you to draw freely around a feature on your picture and drag it to another position. This is a feature on MACDRAW much envied by users of MOUSEPAINT. The lasso will also let you remove an image from a 'background' leaving it intact.

Brushes & Tools

Other tools include a spraygun (pattern selectable), a paintbrush (shape/colour selectable). Text (type/style/size selectable), fill (colour/pattern selectable), borders (size/colour/pattern selectable) and an eraser.

There are seven fonts (no font editor) - System, Courier, Geneva, Helvetica, Hollywood Venice and New York. The styles are Plain, Bold, Italic, Underline, Outline and Shadow. Sizes range from eight to twenty four point (and choose your own - within limits).

Printing

There is no guidance on printers given in the manual. I have an Imagewriter II attached to my IIGs and this produced either black/white or colour printout depending on the ribbon. There are various print options mentioned in the manual. PRINT from the pull down menu produces the full page. The manual mentions a combination of keys to obtain just a screen printout but it certainly does not work for me.

Neither does the option of printing to disk the current screen including menu bars (not to be confused with the routine for saving pages to disk which does work).

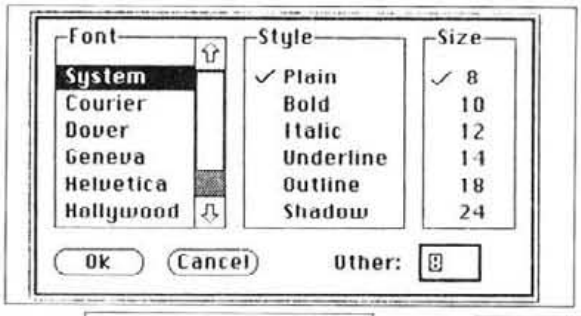
Saving instructions or operations are also a bit of a mystery. You are supposed to be able to save just a part of the picture - that is the part of the page visible on screen but whether I like it or not I still manage to save the whole page. Answers on a postcard please to ....Activision!

Other features

Fatbits is an option which allows editing at the pixel level. That is, it is a zoom feature which will allow you to magnify a small area and edit it easily. Each pixel may be given a different colour.

There are truly dozens of options in this program - too many to explain - but then I don't want to take all the fun away. I will however mention some of the ones which I found useful.

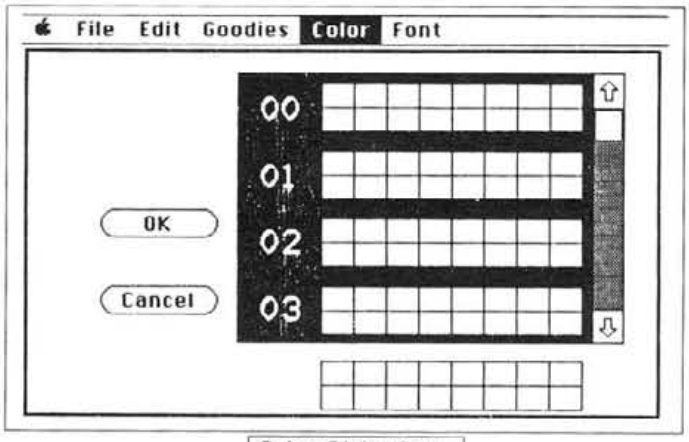
Undo - lets you go back as far as one click of the mouse to correct errors. Revert - allows you to go back automatically to the last screen saved. Doubleclicking on the eraser icon clears the screen. Shift key + lasso (or marker box) allows images captured to move in straight lines. Shift key + straight line tool allows 45 degree lines without fuss. Open Apple key + marker box allows stretching of image. Option key whilst depressed will change pencil to hand icon. Doubleclicking on the text icon gives the font menu. Doubleclicking on pencil icon will give fatbits at the point you need it.



Font Selection Dialog Box

Bugs

By and large the program is pretty stable but I did encounter a couple of crashes that I was unable to duplicate - answers on a postcard, etc....



Colour Dialog Box

The lasso is a very useful tool but takes a little getting used to. It does not like attempts to capture very small areas and in fact some few pixels may disappear.

It is possible, under 'Other' in the font menu,if selecting a larger than allowed for character to lose your cursor and in efforts to regain control crash the program.

A demo version is available from the Apple2000 IIGS Software Library.

Conclusion

This is a thoroughly enjoyable rather than useful program. There is mention in the manual of a program called Writer's Choice Elite which will allow the incorporation of graphics created under Paintworks Plus into documents.

I know that as a user of Mousepaint on the //e, Paintworks Plus has a useful role to play (at least until we see Desktop Publishing on the IIGS) in the preparation of mixed text/ graphic production.

In itself this program affords a useful learning tool for anyone desirous of acquiring mouse and keyboard familiarity. Much better than Apple's own Intro disk but then you have to pay for this one.

Overall the program does what it sets out to do. It allows you to create stunningly colourful pictures which you may put to a variety of uses.

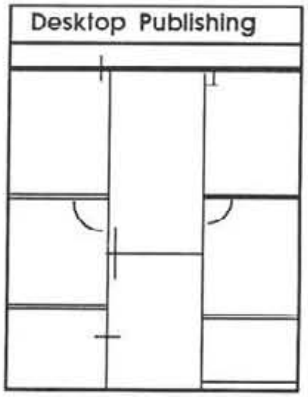
Above all, it is great fun'

PAINTWORKS PLUS was loaned for review by

MGA MICROSYSTEMS
140 HIGH STREET TENTERDEN
KENT TN30 6HT
Telephone: 05806 4278

Publishing on the Apple Desktop

Richard Bradley - DTP Product Manager at Apple(UK) looks at the future of Apple DTP Systems.



The Background

Apple Computer are recognised worldwide as leaders in the field of Desktop Publishing. In conjunction with Paul Brainerd of Aldus (the creators of Pagemaker) and John Warnock of Adobe Systems (PostScript) the company coined the term "Desktop Publishing" in early 1985 and have gone on to lead the growth of the market to it's current size. Last year it was estimated that Apple sold around 70% of all DTP systems in the UK - an extremely dominant position.

The rapidly expanding Desktop Publishing (DTP) community owes a lot to Apple, but equally Apple owes a lot to DTP. The company surged ahead in 1986, its shares moving from the mid-twenties at the beginning of the year to betweeen $70 and $80 today. A lot of the success, profitability and growth have been attributed to the DTP phenomenon.

The "first generation" Apple DTP system was built on three hardware foundations and a growing number of software products. The Macintosh Plus, with one megabyte of memory, mouse, bit-mapped screen and a 32-bit processor (with enough horsepower to haul text and graphics around the screen fast enough to be practical) was the central product.

Secondly, the PostScript-powered LaserWriter, capable of printing full-page 300dpi graphics and a growing range of typographically correct font families.

Finally, AppleTalk, Apple's low-cost (£50.00 a connection) and extremely reliable network provided a means for a number of workstations to share one printer.

These three elements, running page-makeup programs such as PageMaker, the market maker and current leader, Ready-Set-Go; graphics programes such as MacDraw, Cricket Draw, SuperPaint etc and word processors such as Microsoft Word or MacWrite, created DTP as we understand it today, the first generation of a revolution.

The world, however, is changing, and once again Apple's latest product offerings will "move the goalposts" and up the standards expected of a desktop publishing system.

The New Macintoshes

On March 3rd Apple Computer introduced two new models of the Macintosh Computer - the Macintosh SE and the Macintosh II. These two machines complement the existing Macintosh Plus - Apple's one megabyte flagship launched in 1986.

Today we have three Macintoshes to offer the desktop publisher. This is important as we predict that through 1987 and into 1988 we will see DTP evolve from a single-user, stand-alone activity into a work-group and sometimes distributed activity. The three Macintoshes each offer specific benefits to different individuals within a company or organisation.

Apple sees DTP as one element of what the overall Macintosh offers its users. The following diagram shows DTP between productivity (spreadsheets, databases etc) and communications. All these solutions are, however, built around the core benefit of the three Macintoshes - ease of use and graphics

Certainly, Apple's DTP offerings to date have not been without their critics, though these have been mild when compared to the hardware limitations imposed by MS-DOS.

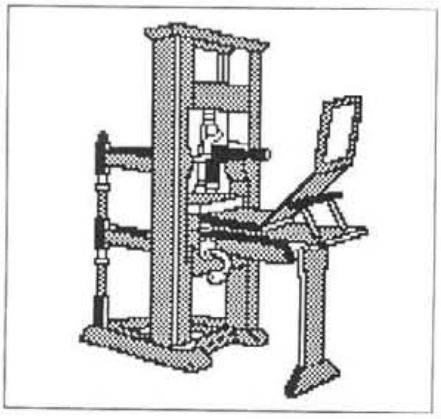
For instance, the biggest single complaint had been the small screen of the Macintosh Plus. During 1986 several third party large screens appeared to solve this problem, but the market has been crying our for a Macintosh generically designed to support one of a range of monitors. The Macintosh II supports both monochrome and colour screens in a variety of sizes.

A lack of processing and disc speed was seen as an opportunity to improvement, particularly when the work involves a large percentage of graphics or page make-up. Both Mac SE and Macintosh II meet these additional needs.

The time spent waiting for a LaserWriter to print your job can be a problem, particularly if a number of users are sharing one printer. Apple's announcement of LaserShare, a print spooling facility, has solved this.

Obviously no system is ever perfect, but we have really listened to our users comments and have tried very hard to provide them with solutions. I think you'll have to go a long way and spend a lot of money to find a more complete DTP system on the market today.

These and other new products do genuinely improve our system offerings and take us into new areas of the document production cycle. Let me paint two scenarios to better illustrate this point.



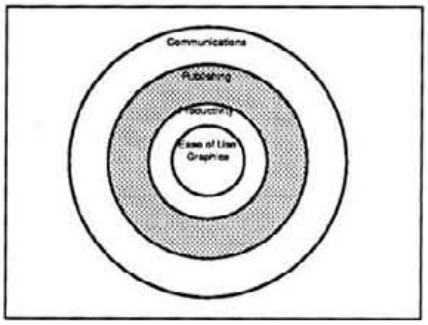
Ancient DTP System

Work Group Publishing

The first is a large company where the marketing department spend a good deal of time working on projects where a number of individuals within the department contribute specific elements of the finished document. This is called Workgroup Publishing.

Apple's approach is to network all the participants together using AppleTalk, and use a file-server to allow everyone to access one central disc. The individuals wishing to contribute only text would be perfectly adequately served by the basic Macintosh Plus - little graphics use and hence no need for the extra speed of a hard disc. Obviously, it is easy to add a hard disc to a Macintosh Plus if you need to do so - but if the primary use is for text creation then you just don't need one.

In addition I would envisage a number of Macintosh SEs. The SE is a faster machine with a built-in hard disc, hence ideally suited for the creation of graphics (which need more processing speed and disc volume). It utilises the same compact design centre as the Macintosh Plus so it doesn't clutter up your desk and can be moved easily if so desired.

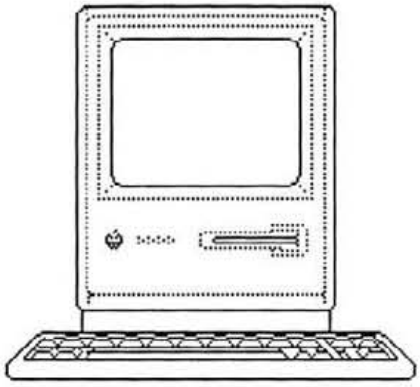


The five aims of Macintosh

Finally, one or two users would have a Macintosh II, our big-screen, colour, workstation-type device. The Macintosh II's larger screen and massively enhanced processing abilities make it an ideal unit for page-composition and advanced graphics for such applications as engineering drawing, architectural design and three dimensional work.

In the future the Mac II will become significant in the area of colour origination work - in fact Adobe's new "Illustrator" package can handle simple colour separations today. In a workgroup environment, however, the principal function of the device would be to assemble elements created on the compact Macs and build finished documents.

However, because of the similiarities of operating environment and standard architecture of the different machines a vast majority of programs can run on any of the three models. Equally, AppleTalk and the AppleShare file server means that all of the machines in a work group can share both hard disc and output devices such as the LaserWriter.



Distributed Publishing

Apple's other major thrust for the new machines is in the area of distributed publishing - where different elements of the production facility exist in geographically remote locations.

We have recently announced a number of Desktop Communications products for use with the Macintosh range. The thrust of Apple DTC is easy, "seamless", connectivity between both similiar machines (Mac to Mac) and different types (Mac to IBM-PC, Mac to DEC Mini etc).

Once again, these products have a significant impact on the DTP market. Let me give you another scenario.

A local newspaper has three editorial offices. Two are branch offices and are solely used for the preparation of copy for the paper along with some simple graphics. The third is the head office, where the paper is printed and all admin facilities are based.

The two remote offices will be equipped with two or three Macintoshes, possibly a combination of Macintosh Pluses and Macintosh SEs. In order to check copy or take stories off-site, each office would also have a LaserWriter. In addition we would recommend a simple modem hook-up into the central office, so that copy and graphics could be sent in via phone line. We have been putting a great deal of time and effort into developing really EASY connectivity products that make linking remote networks together totally transparent. We feel that the day you make communications difficult is the day you've effectively turned off about 95% of the market.

At the central office, we would envisage another network of Macintoshes, a combination of Macintosh Pluses and Macintosh SEs and at least one Macintosh II which would be used to design and lay out the finished pages prior to plates being made.

Many of the larger volume publishers are also installing a PostScript typesetter, such as the Linotronic 100 or 300, to product higher quality artwork - anything up to 2475 dpi - than the LaserWriter. Another option in typesetting is Monotype's Blaser. Being AppleTalk devices these typesetters simply plug into the same network as the Macintoshes and LaserWriters.

Although in this instance this type of system configuration was being used by a newspaper, a similiar set-up would suit many other organisations. For instance a legal company that needs to move contracts and other documents from one office to another, either nationally or internationally. Or a large company producing a monthly newsletter requiring editorial contributions from a number of offices.

Apple are well aware that the "mainstream" DTP market (word-processing plus graphics plus PageMaker) will become crowded and that margins will be eroded by a flood of competitive products. The conscious move into the workgroup/distributed publishing sector is the company's way of opening a new market and hence staying ahead of the game.

We will remain market leader in the mainstream part of the business and as the market grows in size we intend to maintain a significant share. We intend, however, to evolve our solution to be much more than the one user, stand-alone system that we have been so successfull with in 1986.

What the New Macintoshes mean to the Third Parties

Apple's success in DTP is more than a little due to the alliances the company has forged with players in the "traditional" pre-press, graphics and printing industries. Organisations such as Gestetner, Linotype and LetraSet use the Macintosh as an

element of their overall system offering.

Whereas the Macintosh SE is, an "evolutionary" product - a logical development of the Mac Plus. The Macintosh II is revolutionary - an entirely different animal and of immense significance to these larger players in the DTP business.

Why? Because the Macintosh II can perform the functions which today require a dedicated unit probably costing in the area of £15000.00. Most of todays professional publishing, graphics or computer-aided-design software runs on a workstation, meaning expense, a high level of operator skills and inflexibility. At an estimated retail price of under £6000.00, the Macintosh II is in-expensive, simple to use and can run a very high proportion of standard Macintosh software. The benefits are obvious.

Equally important to the "value-adders" such as Linotype is the ability for the Macintosh II to take third party boards through the provision of slots. This means that as well as being extremely powerfull, the machine is also as flexible as the previous generations of "slot machines", the Apple II and IBM-PC. The Macintosh II can even run MS-DOS software if need be, though our opinion is that not many people will want to limit the machines performance by making it run an operating system that cannot utilise the power and graphics ability of the II.

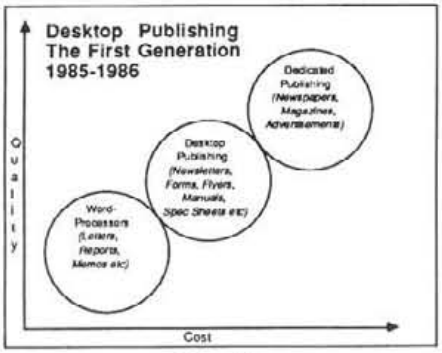


Chart A

We can confidently predict that by the end of the year a new generation of powerfull and very sophisticated DTP-related software will have arrived for the Mac II, opening new markets to complement the DTP mainstream of today.

The Diversification of DTP

There are already a growing number of specialised packages available for the Mac in the DTP arena. I thought I ought to mention a couple of them to demonstrate that over the past eighteen months DTP as we knew it is no more.

In early 1986 we useds to show our dealers a chart (Chart A) to try to position DTP as related to dedicated top-end publishing systems and to lower spec word-processors.

Today this is no longer the case, and the situation now looks like the chart below (Chart B) - a major expansion of DTP both downwards into the word-processing area and upwards into ground previously the exclusive territory of top-end dedicated systems.

The new Macintoshes have played a major part in changing the positioning of DTP. The Macintosh Plus will sit at the low end, the SE in the middle ground and the Macintosh II will impact the high-end, dedicated sector.

The reason that DTP has impacted the low ground is largely due to human nature. We have seen many companies put in a DTP system with the intention of using it for, say, the company newsletter. It is not long, however, before people find other uses for it, such as forms design, marketing or sales presentations, training material and, usually, for important letters or reports. Once a company or institution has got used to having a desktop publishing system around it is very hard for them to move back to the lower quality and performance of a standard word-processing system, even though in many cases w-p is really quite adequate.

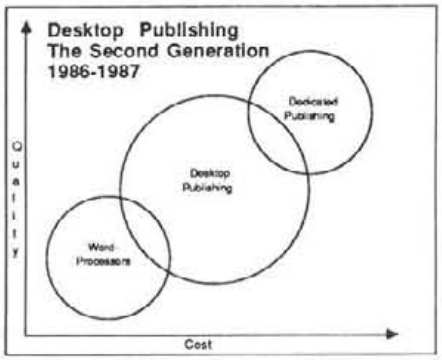


Chart B

The other point I must mention with regard to the low-end is the narrowing of boundaries between DTP and w-p. With the enhanced capabilities of word-processing packages such as MicroSoft Word 3.0 and Write Now, it is now possible to created quite complex pages, incorporating graphics without a dedicated DTP package.

At the top end, newspapers, magazines etc are no longer exclusively using the high-end dedicated systems of a few years ago. In two specific instances we have well over 100 Macintoshes being used in newspaper production. At one of these two sites, the Messenger Group in Warrington, the decision to "go Mac" was made by none other than Eddie Shah, formerly of TODAY fame and now back in the industry he started in - local newspapers.

Shah estimated that his system, costing around £200,000 has replaced a mini-based equivalent which would have had a price tag of close to £1.4-million. And that doesn't include high operator training and maintenance costs.

Conclusion

Apple feel confident that their system will continue to be market leader and trend-setter in desktop publishing. IBM's recent product announcements, plus their previous announcement endorsing PostScript seem to underline the direction Apple has been taking for some years. It was interesting to note that Apple's share price jumped $7.00 on the day that IBM made their announcements - so both industry analysts and Wall Street seem to agree that the company is firmly on the right track.

Every day we're seeing new software and new hardware to further enhance our basic DTP offering. It's becoming ever more confusing for the buying public to try to stay on top of the ever-expanding range of options facing them. I'd just like to make one point as an answer to this problem.

Every application on each of the different Macintoshes runs in a very similiar way. You can move from machine to machine and program to program with a minimum of difficulty - the only thing you'll notice is a bit more speed, a bigger screen and if you want it, colour. People approaching DTP should start, as always, by deciding what they want the computer to do. With the Macintosh they should not worry too much which model to go for as there is a well-defined and clearly understood upgrade path and a high degree of compatability between machines.

We built this market, we understand it very well and we're determined to remain market leaders. I think we will achieve this goal.

PrintShop Lover's Utility Set, Vol 1

A review by Harry Gardiner

The Big Red Apple Club love Broderbrund's PrintShop so much that they have marketed some utilities to help users get more from Broderbrund's product. As a confirmed Print Shop addict I enjoyed reviewing this item from MGA's long list of Print Shop add-ons.

PS LOVERS UTILITY SET Volume 1 will best suit those who have quite a lot of screen graphics images and use Print Shop, or who have lots of Print Shop fonts and/or borders and graphics. It adds some organisation and new abilities to PrintShop, and PrintShop Companion.

What do you need?

- an Apple II+, IIe, or IIc, (with monitor, of course)
- preferably two disk drives,
- a dot matrix printer, with appropriate interface,
- The Print Shop package, and preferably P/Shop Companion.
- The possession of additional Hi-res, Print Shop, or Newsroom Clip Art graphics would make this software extra useful.

Setting Up

The utilities only partly fill each side of the disk, backing-up is easy using CopyA, etc. Slotware and Pinware compatibilty is a bit less extensive than Print Shop - there are fewer printer interface cards and printers provided for in the set-up options, e.g. no Epson APL card. Even so, the lists are quite long, so if you have one of the more common parallel or serial combinations setting up is painless. You get the usual option of one drive or two. Oddly, the program does not save the set-up to disk.

What is it like to use?

Side one boots a main menu for the graphic cataloger, border cataloger,font cataloger, address label printer, envelope printer, and bookmark maker. Side two carries programs to handle hi-res graphics screens, and to convert Clip Art graphics to Print Shop format. On my copy of the program these were missing, but as everything on side one worked well I would expect the second side to be trouble free too.

Generally the utilities work well with Print Shop and its Companion; use was straight forward and bug-free. The screen display is OK, but menu choices etc. are not as pretty as Print Shop.

The utilities will work directly with the graphics images, fonts and borders in the PrintShop Companion and the Print Shop Graphic Library disks. Equivalent files on the PrintShop disk have to be converted to this format by loading them into the appropriate editor (the Companion disk has editors for all three, Printshop only has an editor for graphic images), then saving to another disk; they are saved in theCompanion and graphic library format.

Catalogers

This is a neat idea for a graphics library: every graphic image on a disk can be printed out with its name, seven to a line, ten lines to a page, with a title you choose printed at the top of the page. The fonts cataloger prints an average of five fonts to a page; more per page would make the printed fonts too small to be accurate. With an Epson FX80 and Tymac PPC100 printer card the images were slightly squashed vertically; more sophisticated slotware no doubt eliminates this. The speed of printing will mainly depend on your printers' speed in bit image graphics mode.

Label Printer

This puts a diddy-sized graphic alongside a four line by 30 character long label. This could be address labels, for which there is a very simple data base, or labels for disks, or items for sale, or Christmas presents etc. The amount of text allowed is just adequate for the UK - the Americans have shorter addresses than us. I found that mistakes on labels have to be corrected by starting again; correcting a label during its entry resulted in each original character being overprinted by the correct character, whereas the screen showed only the corrected text. The print is in single pass form, so getting NLQ characters would prove to be a problem.

Envelope Printer

I found this less useful. It only allows three lines of small single pass address text inside a border box designed to fit two sizes of American letters. You can also have inside the border box a graphic in the middle and a larger font two line message of about 13 letters per line.

Bookmark Maker

Perversely, I expected less and got more from this function. Here you choose a central top graphic, a border for the bookmark's tall narrow box, up to four lines of bigger letters in whatever font you have, (only five characters per line!), and three lines of single pass small text at the bottom. There being fewer bookmarks than envelopes in this world the potential use should be less.I found it easy and quick to produce attractive bookmarks; anyone with a talent for 5 letter crosswords will go a bomb!

Coloured paper or card could produce some really attractive results; kids presents for grannies and the like....

Conclusion

These utilities are a must for the PrintShop addict who has everything else; they are useful for those with a large library of graphics. The label, envelope and bookmark printers are useable smaller format print-outs than you can do with Print Shop itself. I liked them on the whole. Schools could find good uses for them, as for other PrintShop software. The 26 page A5 sized manual is clear and well laid out, if a little brief here and there.Good explanations of the related use of PrintShop are included. In use I had to do quite a lot of disk swopping, even with two drives, between PS Lovers, PS, and the PS Companion.

Overall quite useful additions to a versatile, and very easy to use, customisable, pretty graphics printing software system. Good for kids of all ages.

GraphicWriter

Page layout comes to the Apple IIGS with this text and graphics package from DataPak Software.

GraphicWriter has been written specifically for the Apple IIGS and therefore takes advantage of the advanced features of this machine. It is basically a word processing package, but it has a built-in facility to design and incorporate graphic elements within the text, and can also import bit mapped graphics from other IIGS packages.

Combining the wordprocessing and graphics functions gives the program a simplified page layout ability.

The boot up sequence is unlike normal Apple // procedures in that it first loads Apple's Program Launcher, and then from there you choose the application from a diskfile list and double-click it to load GraphicWriter. The opening screen shows a pull-down menu bar along the top, a graphic options bar along the bottom, and an empty document named Untitled ready for input (see fig 1).

The program is very Mac like in operation and extensive use is made of the mouse to control on-screen activities although some of the commands have Open-Apple equivalents.

Rulers and tabs

At the top of the document is a ruler bar marked in inches and eighths (there is regrettably no option to change this to millimeters or anything else) and on the ruler are markers for left and right margins, indent for paragraphs, and tab marks, all of which can be adjusted with the mouse. An important difference from some other wordprocessors is that there is only one ruler in view and it applies to the paragraph currently being worked on (where the entry marker is). Each paragraph actually has its own ruler, which can be the same as the previous one if you just carry on typing from one paragraph to another, or can be made different by selecting the paragraph and changing the settings.

Tabs are selected from the Format menu and can be of three types - Left (the normal tab), Centre (between margins), or Decimal (to align decimal points in columns of figures).

Text entry

A flashing vertical I bar marks the entry point for text input. The mouse moves an 'I' beam indicator when in the document area or a pointer when on the top or bottom menu bars or on the ruler or scroll bars. Text appears on the screen to the right of the marker and continues across the page until it reaches the right margin when it automatically word wraps to the next line.

The lines are also justified according to the setting selected from the Format menu - left, right, centre or fill justified - and likethe tabs are related to the paragraph being worked on. This makes it very easy to lay out the page to go around pictures or graphics for which space can be left and they can be put in later. You have to remember though that all of a paragraph has the same settings and this puts a limit on where an inset can go.

It is usual to select the general options first before starting to type, and you will need to choose the font from the Font menu and its size from the Style menu. In the review version of the program only three fonts are available - Helvetica, Bookman and Script, and four point sizes - 9, 12, 18 and 24. There is a useful Screen Stretched option available from the Page menu which makes it much easier to read the text when working in 9 point, and this overcomes the distorting effect of the 640 x 200 aspect ratio of the GS screen, but has no effect on the printed output.

Selecting a piece of text or a menu option is done by pressing the button and dragging the mouse as is normal for a Mac like application. Once selected the text can be cut and pasted somewhere else or to the Clipboard, or its format changed to Bold or a different font size.

Colour and all that

So far we have looked at ordinary black print on a white background but of course the IIGS can produce a variety of colours on the screen, and GraphicWriter can make use of a limited range of either 20 solid colour combinations of two primaries plus black and white, or 48 combinations using the dithering technique. A colour is

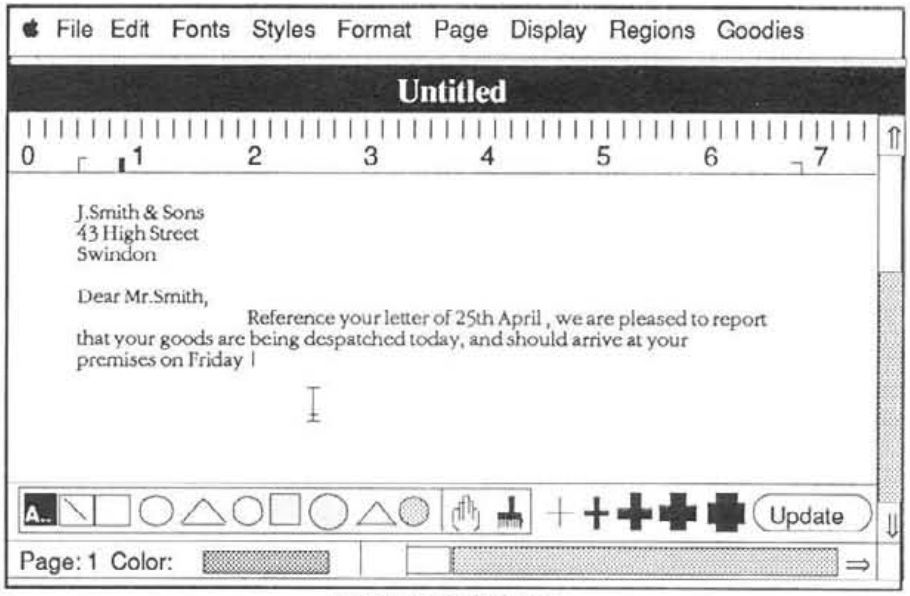


Fig 1: The Text screen

selected from the Colour palette on the Goodies menu, and text typed after choosing a colour, will show in that colour from then on.

There are two other ways to colour the text, you can type it all in Black and then select parts with the mouse and colour them, or you can use one of the graphics facilities which is to select **Dye** from the Goodies menu, then click on a filled box symbol and lay a box over the text you want coloured. The Dye option only affects the black dots on the screen making the text your chosen colour. The limitation with this method is that the dyed area is actually a graphic object (more on these later) and will not move with the text if you reformat the paragraph.

What use is colour for word-processing you may ask? Well, if you have an ImageWriter II and can afford coloured ribbons then you can have your documents printed in a limited range of colours from the four on the ribbon. Best results will probably be from using pure colours red, blue, green and yellow, and will make the ribbons last longer but not having an ImageWriter, I was not able to see how good this is.

Object graphics

A few basic drawing tools are provided and from these you can create simple graphics and diagrams in your documents or make borders or highlights for the text.

Designs made from object graphics can be changed or re-sized, or moved to another location because they consist of separate elements which are defined by their position and structure, unlike bit-mapped graphics which are a just a pixel by pixel map of the screen area. There are two other colouring modes other than dye which are **heavy paint** which covers anything underneath, or **watercolour** which colours the background allowing existing black to show through.

Regions

Up to now we have looked at the document as one or more sheets of paper with the text and graphics layed out within the same space. GraphicWriter introduces a new concept of dividing the working area into **regions** (you can consider the document up to now to be simply one region) each of which can be either text or object graphics or bit-mapped graphics. A region can be bottomless - like a continuous document - or boxed, that is it has a finite area but can be any size.

You select a new region from the Regions menu and a rectangle appears on the screen, and you then make it the required size and place it in position with the mouse. While still selected you decide if it is to be an object or canvas (bit-mapped) graphic region, and then start to draw within it. In canvas mode the pixels are coloured as you draw and cannot be re-sized or erased other than by overpainting.

In object mode the elements can be changed individually until the graphic is finished and a completed region can be acted on as a whole without upsetting the design. Bit mapped graphics can be imported from painting programs directly into a canvas region, and if you make the region large to start with you can easily see the area you want and then reduce the region size to suit; but you cannot change the scale of the picture.

Text can be pasted into a canvas region but once positioned it then becomes just a dot image and cannot be edited in the normal way.

Printing

GraphicWriter can output to the ImageWriter I and II, a Daisywheel type printer, and to the LaserWriter through the serial port (or AppleTalk). No other printers are currently supported, nor can the output be directed through a printer card in Slot 1.

The ImageWriter II can print in colour if this is selected; the other devices will produce equivalent shades on a grey scale, except for the Daisywheel which can only print text.

Unfortunately, at present the LaserWriter drivers and the updated System software have not yet been released by Apple Inc. which means some print options and in particular the LaserWriter option are not available in the current version.

I prepared this review on GraphicWriter and would have liked to show you that the Laser printed output would not have looked out of place alongside the PageMaker produced pages, but we will have to leave that for another time. All I will say to Apple is 'get your finger out!' since this is not the only program that is waiting desperately for the new drivers. To offset the problem DataPak are offering a free upgrade for buyers of version 1.1 to the new version 2.0 of the program as soon as it is released.

Evaluation

This package cannot be considered to be a full function wordprocessor since it does not have functions like 'find and replace', but then I do not think it sets out to be. If you want to, you can import your text from another WP package having already typed it in, prepared it, and verified it through a spelling/grammar checker.

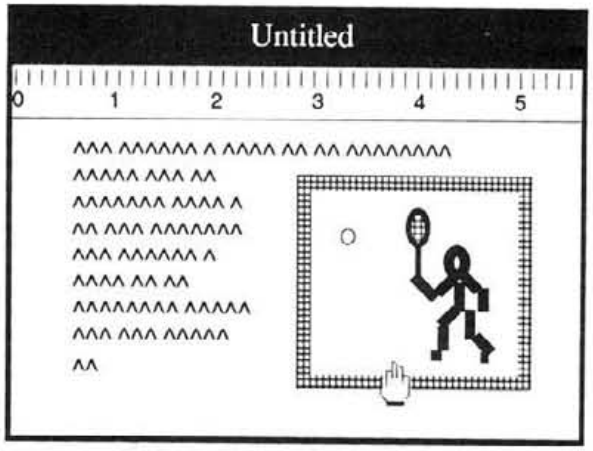


Fig 2: Regions and Graphics

It is much more of a page layout program and is essentially screen oriented, and at present it is the only IIGS program that handles text and graphics in quite this way. Of course it shows its limitations and does not pretend to be a PageMaker or Xpress but then it is considerably cheaper, and much simpler to use.

To quote Gary Crandall the author **"the single cause of most confusion and trouble with GraphicWriter is its SIMPLICITY"**, and I think from my experiences with it this is true.

Overall it does the job well enough and is a welcome addition to the list of GS specific software. I look forward to putting version 2.0 through its paces with the LaserWriter when it comes out.

Our thanks go to DataPak Inc. of California for letting us have this copy for review.

The package is available in this country from most Apple dealers, and also from MGA, Bidmuthin and MacSerious.

JustText

by Irene Flaxman

I first met Bill Bates and Stephan Youngs at MacWorld in San Francisco last January. It wasn't easy, as there was so much interest in JustText and the up-and-coming LaserPaint that you couldn't get near their stand most of the time. Bill is the author of the program, and Stephan is the UK distributor, and they make quite a team. I'd like to thank both for taking the time to talk to me, and Stephan for lending me a copy of the program so I could prepare this review, then extending the loan period so that I could make sure I was happy with the final version. I have also to thank Stephan for lending me a scanner for evaluation. Some of the resulting graphics are reproduced with this and the MacMovies articles, and I hope you are as impressed as we were - particularly as the originals were coloured photographs. (My full report on the scanner will be included in the next issue).

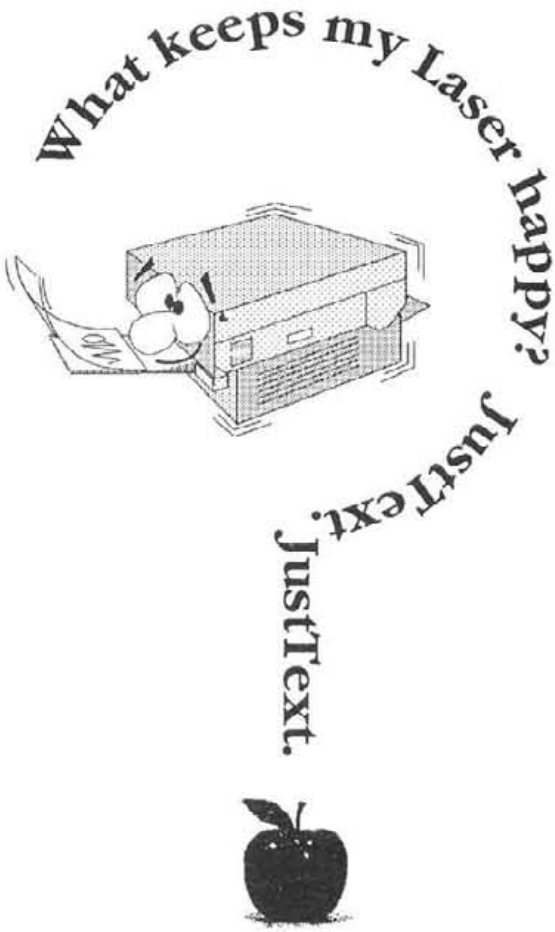
My thanks also go to Garry Watson of The Setting Studio in Newcastle, and to Bruce Nivison of A J Vines in London. Both use JustText professionally, and both were very helpful when I initially started to use the program.

This is a professional typesetting system, allowing you to mix text and graphics and even to incorporate PostScript coding, and using the Macintosh as the front-end for PostScript printers. I am not a professional typesetter, so I appreciated the fact that Stephan took a chance in letting me loose with the program. The best way to review a product is to use it, so I prepared a few of the pages for each of the April and June issues of the magazine, and you can judge the results for yourself.

The choice of program name was, perhaps, a little unfortunate. The reason for calling it 'JustText' is that the program considers everything as just that - even graphics are regarded as text (i.e. the PostScript coding of the picture is text). However, the implication that many people have read into the name is that it will only handle text and not graphics - but nothing could be further from the truth, as you can see from these pages.

The program is not meant to appeal to everyone. It is aimed at a specific market, i.e. the professional typesetter. Precision is the name of the game, and it requires a little practise (especially if you know nothing about typesetting, as in my case). I learnt to think in picas and points, and to estimate the finished size of a piece of work. Having mastered the art, I found the program easy to use, and so quick it was amazing - although I used to find PageMaker great, I now find that program painfully slow and limiting. OK, so I have to imagine what the output will look like, and I had many false starts initially, but I put that down to experience, and I now find that I really enjoy using JustText and I have learnt so much that I feel it was worth the effort. It is not a typical Macintosh (WYSIWYG - What You See Is What You Get) program. You do not see a preview of the printed output on the screen, although Bill is working on a new program which will write PostScript to the screen - that will then allow you to preview the printed page.

One of the problems that I found with so-called WYSIWYG programs is that they cannot be as precise as that description suggests - the Mac screen does not have the same resolution as your output device, so the screen display cannot accurately describe the output and it can be really frustrating when you visually align objects on the screen, only to find that the printed version is out of alignment. Also, they rely on menu-driven commands, which restricts the number of options open to the user - this is fine for most business applications, but a professional typesetter is a perfectionist and must be able to meet exact specifications. JustText allows you complete control over your output - the only limitation being your imagination. You may include PostScript coding to create added impact.

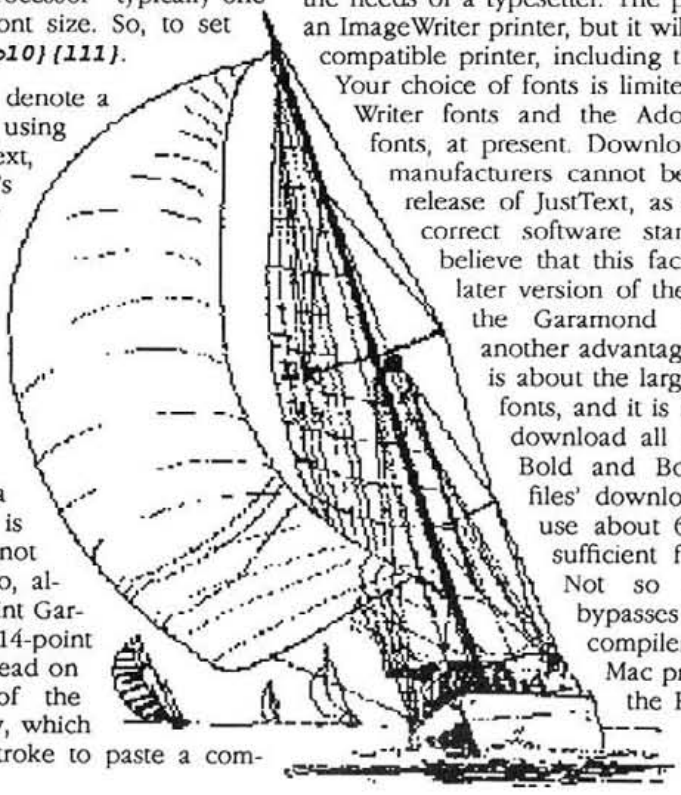


So, what's so different about JustText? It can best be described as a 'PostScript processor' for manipulating text and graphics. You specify columns, font details, etc. by means of codes embedded within the text. You can type your text in directly or, if you wish, you can use a word processor (I used MacWrite), then convert that to a text file using the utility program provided. That conversion will add the basic codes to the text, to describe the fonts, paragraph breaks, etc. - thereby breaking the back of the coding. You can then open the new file and start manipulating your text to achieve the effects you require. If you wish, you can incorporate PostScript coding into your program, which can be used to rotate text, to create an arbitrary path for your text to follow, produce shadow fonts, and for many other special effects. Bill has built in many utilities which will allow you to create interesting effects with the simplest of instructions (e.g. to set the 'drop cap' over three lines for this paragraph, I simply used ***{dc3S}o***).

This is, perhaps, an appropriate point to give some definitions. Fonts are each described by a code number in JustText, e.g. Garamond-Light is ***{f47}***, Garamond-Bold is ***{f49}***. Fonts are defined in points (1/72 of an inch) - this article has been set in 10-point Garamond, the measure being the length from the top of a capital letter to the bottom of the lower-case descender. A pica is equal to twelve points, or 1/6 of an inch. Leading is the distance between rows of text, measured from baseline to baseline. This, too, is defined in points, and is usually preset by a word processor - typically one or two points higher than the font size. So, to set these pages, I have used: ***{f47}{p10}{111}***.

Carriage returns are used to denote a new paragraph when using word-processors. In JustText, you use the traditional typesetter's 'quad' commands (left, right, or centre) to move to a new line, and indicate the justification for the paragraph just completed. Spaces between paragraphs can be defined using the quad commands, or by use of the 'advance' command for more fine-tuning.

One of the advantages of a non-WYSIWYG program is that the screen font does not have to echo the printed font. So, although this has been set in 10-point Garamond, it has been edited in 14-point Geneva which is much easier to read on the screen. Another feature of the program is the 'smart keys' facility, which allows you to redefine any keystroke to paste a commonly-used string into your text.



You have total control over what appears on the page, and where it appears - down to one thousandth of a point. Columns are specified by use of a set of 'x' and 'y' values, with 0,0 being the bottom left-hand corner of the page, and measurements again being expressed in points. Columns can be set to any size, and text will automatically flow from the end of one column to the start of the next, even if the next column is on a new page - unless you override the automatic function with more specific instructions, of course.

Text facilities include leadering (as in the Editor's note in the 'Hebrew Tools for the Mac' article), kerning (i.e. the adjustment of spaces between pairs of letters - either locally or globally), ligatures (by reference to a table which you can add to), a full range of indents (including hanging indents and hanging bullets), tables, setting of mathematical formulae, subscript, superscript, find and replace, hyphenation (including the ability to specify additions to the hyphenation dictionary), scaling (both horizontal and vertical, to give condensed or expanded text), fractions, rotation of text, recto and verso format, page breaks, page numbering, pi font (i.e. special symbols), reverse type, and a 'list words' facility to help you check for spelling mistakes. Boxes, rules and borders can be added by simple instructions, and will be precisely positioned in relation to your text. Bill writes and produces books for a living, so he knows what he wants from a typesetting program - this fact is obvious when you use JustText, as it answers the needs of a typesetter. The program will not address an ImageWriter printer, but it will address any PostScript-compatible printer, including the full Linotronic range. Your choice of fonts is limited to the standard LaserWriter fonts and the Adobe downloadable laser fonts, at present. Downloadable fonts from other manufacturers cannot be used with the current release of JustText, as they do not follow the correct software standards - however, we believe that this facility will be added to a later version of the program. I like to use the Garamond font, which highlights another advantage of JustText. Garamond is about the largest of the downloadable fonts, and it is not normally possible to download all four styles (Light, Italic, Bold and Bold-Italic), as the 'prep files' downloaded to the LaserWriter use about 60k of RAM leaving insufficient for the full font family. Not so with JustText, which bypasses all the interpreters and compilers necessary for most Mac programs, and downloads the PostScript file directly to the printer.

Graphics can be incorporated by one of three methods - by calling in a MacPaint file, by calling in a PostScript file, or by incorporating the PostScript representation of your picture in your program. A utility is provided, to allow you to convert a MacPaint file to PostScript. This is a really neat utility, allowing you to open a MacPaint file, scale it (horizontally and/or vertically), clip (or crop) the image, rotate the image, draw a box around it, and position anywhere on the page (by use of the 'x' and 'y' coordinates. You can then save this as a PostScript file, for incorporation directly into one of your documents or for importing by use of the **{ia}** command. Two optional utilities allow you to convert Thunderscan files to PostScript and to convert MacVision files to PostScript.

In this version (1.0i), file size is limited to 32,767 bytes (about 16 typeset pages of text), but this is to be extended in a later version. You can run out of space if you are incorporating complex graphics directly in your JustText document - if you try to paste in too large a block of PostScript, you will be warned that this would create too large a document, and the paste instruction will be ignored. If this happens, revert to calling in your graphics file during the printing. Text editing does slow down as your file size increases, so this is another reason to keep the graphics as a separate file to be called in during printing.

I found that even the most complex of pages printed to the LaserWriter much more quickly than was the case with the standard WYSIWYG programs. Indeed, having set some complex pages with JustText, I tried to recreate some of them with the standard WYSIWYG page-composition programs, but I was unable to print them - the software could not cope with the complexities.

What, then, were my overall impressions of the program? I found that it took me a little while to learn how to use it - unlike most Mac programs, which are totally menu-driven. The examples on the disk, and the short tutorial which takes you through the basics did help me here, though. It is also worth saying that a good deal of this learning was necessitated by my lack of typesetting knowledge, and I am not sure whether there was any real advantage in my having a programming background. Having learnt the basics, I really like the program - I enjoy the speed and the freedom from restrictions. I have certainly not become an expert, and I still have much to learn, but the possibilities are endless, limited only by the imagination, and I enjoy trying to create new effects, often by incorporating PostScript coding into my documents.

As an amateur with no previous experience, I was more than happy with the results that I achieved having used the program for only a short time. In the hands of a professional, the results of using this program can be stunning. JustText will not suit everyone, it is not for the MacPainter who has to see what he is doing on the screen, and it is important to know what to expect from it. But, if you are happy to 'proof' on the LaserWriter rather than on the screen, and to use embedded codes rather than menu-driven commands, JustText will allow you to use your imagination freely, and to create more professional documents.

It is a very powerful system, full of tools that are there to aid you in your page design. Use your imagination and you can create wonders, and the coming enhancements and new products which Bill has in store for us promise more power for the future. These include the ability to direct PostScript to the screen, so that you can see your page forming as you create the code; LaserPaint (previewed at MacWorld in January), which will allow bit-editing in a 300 x 300 dpi grid; LaserDraw, for mixing bit-mapped and vector graphics; and scanner software for use with the 300dpi scanner from New Image Technology - I have tried an early version of this, and it promises to be really powerful (but, more of that in the next issue!).

JustText 'pandas' to your every need!

Original picture was printed on parchment. Image was scanned with New Image Technology 300dpi scanner then saved as a PostScript file (770K). This was edited to scale the image by 55%, to fit available space.

JustText™, by Knowledge Engineering Inc., costs £195 + VAT. The UK distributor is MacEurope, Crown House, Abbeydale Road, London NW10 7PN. Telephone: 01 965 6905.

Multiscribe

Dave Ward tries the latest word processor for the Apple //e & //c and finds pull-down menus and mouse control.

MULTISCRIBE is a new word processor for the Apple //e and Apple //c computers which boasts many features only found on the Apple Macintosh. Double High resolution graphics are utilised to allow pull-down menus with mouse control.

The package consists of a 261 page manual/tutorial and a fully copyable 5.25" diskette, of which both sides are used. We were loaned version 1.10 for this review and with the package was a 18 page addendum which boasts the following important improvements:-

- **Enhanced ProDOS Hierarchical File System Support**
- **Ram Drive Support**
- **UniDisk 3.5 Support**
- **Font Numbers**
- **Increased Printer Interface Card Support**
- **Printing Dialog Box Changes**
- **Macintosh-like Scroll Bar**

As one might deduce from the name MULTISCRIBE this is a word processor that is 'font-orientated' in that it allows one to have multiple fonts within a single document. In fact over a third of the manual details use of the Font Editor utility provided on the diskette; 255 fonts are allowed of which 55 can be user defined.

The MULTISCRIBE program is so large that it will not fit into the memory of a 128K Apple //e or 128K Apple //c, therefore it uses 'overlaying'. As a consequence of this two sides of the (5.25") diskette are required to contain all the program utilities and fonts.

When you boot-up your copy of your 5.25" master diskette you are soon requested to turn over the diskette and press <RETURN>. Should you have a 'ram disc' it will be found automatically and you will be asked if you want MULTISCRIBE to be loadedinto it. We will return to the subject of 'ram discs' later.

During boot-up MULTISCRIBE reads the names of the first 16 fonts it can find on the diskette. Finally you are left with a 'blank' screen with a menu-bar at the top of the screen, a scroll-bar on the right-hand side of the screen and the I-beam in the top right-hand corner of the screen where text will be entered.

MULTISCRIBE uses three different pointers for mouse operations:-

- The arrow for pointing to the menu-bar, scroll-bar and dialogue boxes.
- The I-beam where text insertion will begin. You may move the mouse cursor all over the screen but the I-beam will only move when the mouse button is clicked.
- A wrist-watch is displayed when MULTISCRIBE is carrying out a time consuming operation.

MOVING AROUND

Like most mouse-based software for the Apple // range of computers there are three ways of moving the cursor and carrying out other operations :-

- Using the mouse to pull down menus from the menu-bar, click dialogue boxes or move the elevators on the scroll-bar.
- Pull-down menus can be accessed from the keyboard by pressing the ESCape key followed by one of the four arrow keys to select the menu from the menu-bar and for moving up and down a particular menu. A particular option in a menu will be highlighted in inverse which can be chosen by pressing <RETURN>. Dialogue boxes are provided with alternative keystrokes such as <RETURN> to accept and <ESCape> to cancel.
- Certain special keys are made available as a short-cut to certain options in the pull down menus. These alternate options are actually listed in the pull-down menus for convenience and to aid learning by inculcation. Usually these keystrokes involve the pressing of the open-apple key simultaneously with another key.

MULTISCRIBE is almost always in insertion mode and wherever you place the I-beam (remember to click the mouse button!) you may enter text. Initially this will be in the default font (the first read from your boot diskette). You are able to change the font at any time by pulling down the Font menu from the scroll-bar and clicking the font you desire. MULTISCRIBE also provides six styles (plain, bold, italic, underline, outline, shadow) plus superscript, subscript and all upper/lower case. Font sizes can be changed by choosing the Size menu from the menu-bar and clicking the size (x1.0, x1.5, x2.0, x2.5, x3.0) you want. Fonts do have a size limit which you will not be allowed to exceed.

EDITING AND FORMATTING TEXT

MULTISCRIBE has been provided with a wealth of ways of traversing through your document. The simplest way is to use your mouse to move the elevators on the scroll-bar. The arrow keys may be used as an alternative and, like Appleworks, you can use special open-apple keystrokes (OA-).

OA-1 (open-apple and 1 pressed simultaneous-ly) will take you to the top of your document whilst OA-9 takes you to the end-of-document, choosing keys between 1 and 9 takes you a proportional distance within the document. You can move up or down a screen at a time using OA-< and OA-> keystrokes.

Whilst scrolling through a document, disk access may be required when fonts change. This does not always happen and almost seems to be a random feature! Clearly it is a problem that can be reduced by using a 'ram disc'.

Anywhere within your document you can place the I-beam and insert text in any of the fonts from the Font menu in any style and allowable size.

Next you'll probably want to format text. Well, MULTISCRIBE caters for this with the use of Rulers. At the start of a document resides a hidden ruler that pre-determines the format of the text. You may place a ruler anywhere in your document by positioning the I-beam and then choosing the option Insert ruler from

the Format menu or use the special keystrokes.

A ruler consists of two parts , the upper scale is a ruler marked in inches, divided into eighths, where you can set margins, indentations (bullets) and up to 10 tabs. The bottom part below the scale allows the setting of justification (left, centre, right, full) and line spacing. Incidently, no formatting of the text is made until the cursor is taken from the ruler. Text is then altered until the next ruler is encountered.

....You can search on whole or part words.....

MULTISCRIBE provides seven different types of editing of blocks of text (overwriting, deleting, changing style, cutting, pasting, replacing text with text). Before you can edit a block of text you must select it; selected text is highlighted by being in inverse. Selecting can be achieved by placing the I-beam at the start of the text block and then 'dragging' the mouse (with button pressed) to the end of the block. A block may extend over many screens if desired. For instance to delete a block of text you just press the delete key and it has gone! Fortunately there is an undo option in the Edit menu just in case you wanted to perform some other action such as choose another font,style or size. Changing a font is just as simple - select your text then choose the font from the Font menu - that's it!

FIND, REPLACE, AND SEARCH

MULTISCRIBE allows one to Find or Replace sequences of up to 43 characters at a time. Simply move the cursor to the place where you wish to begin the search and then pull down the Search menu.

Find is very much like Replace; in both cases you will be presented with a dialogue box and requested to enter the word to find. You can search on whole or part words with the option of ignoring the case. Only Replace will require you to enter the sequence with which you wish to replace the found sequence.

Replace can be useful to enable difficult words or sequences of characters to be entered as a simple code; for instance whilst writing this review I used *mz* for MULTISCRIBE and Replace allowed me to change all occurrences of *mz* to MULTISCRIBE when I had finished. From the Search menu you can also choose to jump to a specified page in the document.

SAVING DOCUMENTS

Whilst typing a document it is a good idea to Save your master-piece to a more permanent storage device such as a diskette; every five minutes seems to be reasonable. MULTISCRIBE allows you three ways in which to save documents when you pull down the **File menu:**

- **Save As...** displays a dialogue box allowing you to enter the full or partial name of the document.
- **Save** automatically saves the document as the name you last saved it.
- **Save As Text...**is provided to allow documents to be read by other word processors. A 'pure' text file is produced where all the control codes used to keep track of fonts and formatting have been purged.

In MULTISCRIBE and most other mouse orientated software you 'Open' a document but this is really equivalent to loading that file. Choose Open from the File menu or use OA-J and you will be presented with a dialogue box, which allows you to enter the directory name or drive where the file is expected to reside. All the text files found are then listed and you pick the one you want. In a few seconds your file is ready to edit. Pure text files produced by another word processor will be loaded but will not be formatted and displayed only in the current font. MULTISCRIBE files will, of course, contain the necessary codes to produce formatting and fonts and so will appear just as they were saved.

PRINTING OPTIONS

Now that you have finished your masterpiece or just require a hard copy, MULTISCRIBE provides interfacing to 10 popular printers via at least 40 printer interface cards (at the last count), many of which I did not know existed.

The first thing to do is to pull down the menu from the Apple device and choose **Printer Setup...**; a dialogue box appears from which you can select your printer interface card and the slot in which the interface card resides. To save having to carry out this setup again you may store it on the diskette.

Since you will probably want to take advantage of the multi-font capability of MULTISCRIBE, a dot matrix printer with graphics output is essential.

To print your document you pull down the File menu and choose **Print...**, when you will be presented with a dialogue box headed by the name of your printer and interface card and five important options :-

- **Quality** : High,Standard or Draft. Text for non graphic printers or very fast draft.
- **Number Pages** : Top, Bottom or no number.
- **Paper Feed** : Continuous or Cut Sheet.
- **Page Range**
- **Number of Copies.**

When you pull down the **File** menu you will also observe the option of **Print Merge...** This allows one to choose a list of documents to be printed in sequence as if they were a single document. This is why you are allowed to number pages with any starting value!

FONT EDITOR

The FONT EDITOR can be invoked by 'pulling-down' the menu from the Apple device in the top-left-hand corner of the menu-bar. Just like MULTISCRIBE it can be controlled by the mouse or keyboard. For a word-processor like MULTISCRIBE the FONT EDITOR is of paramount importance and almost half of the manual is dedicated to its use. There are a maximum of 255 fonts allowed of which 55 (201-255) are user - definable.

The Font Editor is invoked by pulling down the menu from the Apple device at the left of the menu-bar and choosing **FontEditor**. You will be asked if you want to save the document already in memory.

On entry the Font Editor is a blank screen with a menu-bar at the top of the screen. First you must choose the File menu and select New or open an existing font on diskette. When you have so chosen the screen will be divided into four parts. The top left-hand area shows a grid of the pixels of the current character being edited. The bottom left-hand area shows the character as it will appear in the six main styles. In the bottom right-hand part the keyboard is depicted with the last key pressed highlighted. The top right-hand part shows the actual characters in the font.

You can choose the character to be edited by pressing that key and then choosing the **Get** option from

the Design menu. Likewise you would Put the character back into the font by pressing the key to represent it followed by choosing **Put** from the Design menu. You define characters on the grid which can be up to 29 dots wide by 28 dots high. A base can be set which will allow descenders for lower case characters. The horizontal number of dots may be varied from character to character for proportional justification. Indeed this is advised in the MULTISCRIBE manual. The design menu contains options for flipping characters horizontally and vertically as well as moving it about the grid. Both mouse and keys can be used to set or unset the dots in the grid, however, the keyboard method is generally easier.

The number of fonts that can be produced by the Font Editor are almost limitless within one's artistic and creative ability. As an experiment we produced a chessboard font to allow the printing of chess diagrams.

MEDIA AND MEMORY OPTIONS

The addendum to the manual very clearly describes how to transfer the files on the MULTISCRIBE master diskette onto 3.5" diskettes or onto a hard disk or for that matter any other disk system recognised by ProDOS.

The use of 'ram discs' is also very well described, in particular the reference to prepare diskettes that will set up 'ram discs' for Multiram or Ramworks owners and allow MULTISCRIBE to be automatically loaded into them. Owners of Apple-compatible memory cards are best off since these cards are automatically recognised by ProDOS and hence MULTISCRIBE on bootup. Such cards are :-

- **Ram factor** by Applied Engineering
- **PlusRam** by Cirtech (UK)
- **Flipper** by Cirtech (UK)

To transfer MULTISCRIBE into a 'ram disc' will take just a little longer. For instance booting a copy of your MULTISCRIBE master diskette will take just about 40 seconds, whereas the total load time into a 'ram disc' will take just a little over a minute longer. This time is well worth it because time will be saved during the operation of MULTISCRIBE where the disk will be accessed every time you load, save, search, find or change fonts.

Uploading a 'Flip disk' into Flipper will take just 25 seconds to load everything into ram and get MULTISCRIBE running! Also, if you have MULTISCRIBE in a work area in a Ramfactor or Flipper, changing over to MULTISCRIBE will take just 2 seconds.

As you might expect ,a word-processor using the double hi-res screen will be very much slower than those word-processors that use the text screens with the built-in character set. Scrolling and other screen operations are slower with MULTISCRIBE for the above reason. Operations are also slowed by the regular need for overlays from disk when operations such as Save, Open, Find, Replace and Print are invoked. That's why a RAM DISC is indispensable.

CONCLUSION

- ❑ You don't appear to be able to see all the files on any directory (Catalog). When you Open a document only text files are listed since these are the only file type that MULTISCRIBE uses.
- ❑ It would be nice to be able to carry out other disk operations such as Renaming or Deleting files. MULTISCRIBE does not appear to allow these.
- ❑ No facility seems to be available for formatting blank diskettes on which to save documents within MULTISCRIBE and this is apt to be most annoying if you don't carry a ready formatted supply! Let's hope that this sad omission is corrected in future version.
- ❑ When you select a block of text to change it to a larger font or size MULTISCRIBE appears to reformat it line by line rather than by paragraph so that the word wrap is completely lost on the screen.
- ❑ When you opt for a larger size of characters the dots are just enlarged giving the characters a 'grainy' appearance. It is a pity that MULTISCRIBE couldn't be a little more intelligent and fill in some of the angles. Perhaps that's asking too much, though.
- ❑ For an up-to-date package that is totally unprotected and operates under ProDOS I was most surprised to find that it did not boot on the Apple IIGS.

If you need a word processor on the Apple //e and Apple //c 128K computers, which has many of the features of Macintosh packages, that will produce a variety of fonts at a very reasonable price then MULTISCRIBE is for you.

Multiscribe costs £59.00 and is available from Bidmuthin Technologies 01-907-8516

DTP Design

Henry Budgett gives some hints on DeskTop Publishing and explains why you need some of the old layout skills.

If you believed everything you've ever read about desktop publishing it's quite possible that you think anyone who can use a computer can turn out professional looking material with consummate ease. And, I'm sad to say, you'd be completely wrong.

Desktop publishing is unlike any other kind of software ever set loose on the market. Like most creative processes it requires certain skills and an overall understanding of simple design principles before even partially decent results are achieved. This contrasts strongly with the simplicity of word processing, data base or even spreadsheet software. Here, letters, words and figures can be entered at will and the underlying structure of the software takes care of the details.

The whole problem was compounded by the fact that the first successful DTP system was based on the Macintosh; a computer designed to be easy to use and, therefore, give the feeling of rapid achievement. It is only now, after some 18 months, that people are beginning to realise that owning and using a DTP system doesn't instantly make one a great designer. What this article will try to outline are the basic essentials of that design process, so helping new (and not so new) users avoid some of the more gross errors. For it is sadly true that misuse of a DTP system can actually reduce the impact of your material rather than enhance it.

In the first instance it is important to establish whether or not you actually need 'desktop publishing' as portrayed by the advertisers. If your material consists of pure text; a book or report, for example, then it is quite likely that you'll be better off with a high-powered word processor such as Word 3, MacAuthor or even a typesetting system like JustText, TeXtures or Page One. However, as the real appeal of DTP is in its ability to manipulate pages it's likely that we are looking for a page makeup product such as PageMaker or its many rivals. These products excel where text and graphics are to be mixed on a single page.

The single most important element of a page is its overall design, regardless of, but strongly influenced by, its content. The device which holds the design together is the grid and this is what gets designed first. An A4 page is too wide to have a single column of text; the human eye gets bored very quickly, so adopt a two- or even three- column layout from the start. Four columns can be used but later when the ground-rules are better understood. There should be a decent gap between the columns and it is often useful to place a vertical line in the middle of this gap, so physically preventing the eye straying from one to the other. Text doesn't need to be justified, a lot of research indicates that ragged columns are 'friendlier' and easier to read.

Space is often more important than type so don't pack the lines too closely together. Most desktop publishing packages offer an automatic leading setting as a default and this should be generally over-ridden. Large amounts of text can be set in 10pt type on 11pt leading (leading is the amount of space between the lines) and this provides a nice balance for most situations. Leave blank lines between paragraphs and make frequent use of headings to hold the reader's interest. Set the body text, that's the main volume of text, in a serif typeface, that's one with those little ticks at the ends of the letters like Times, Palatino, Bookman, etc, and the headings in a sans serif face such as Helvetica, Avant Garde, etc. The variation between the two creates interest and, anyway, serif faces are easier to read in large quantities. Once you've made the choice, though, stick to it throughout the publication, don't chop and change from one style to another.

Stick to just two typefaces through out the publication; one for the text, the other for headings and so on. Use no more than three sizes; one for the body text, a larger size for major headings (headings within the text should be bold but not necessarily bigger) and a smaller size for page headings, page numbers, captions and so on. Leave large margins at the top and bottom of pages, preferably separated by some device such as a rule to draw the eye into the page. Don't be afraid of white space, use it to break up the page and provide more interest. Use illustrations and photographs but don't overdo it. A picture may be worth a thousand words but you'll still need some text to explain what the pictures are about!

Some words of warning on the subject of pictures are in order at this point. Just because you can buy a scanner which will capture photographs and drawings doesn't mean that it is necessarily the best way. At 300dpi the quality achieved with photographs can generally be described as poor to awful. Storing a single B&W photo can also absorb an awful lot of memory, megabytes in some cases. Simple drawings and illustrations are generally OK but avoid enlarging or reducing them wherever possible. Scanners capture images as a pattern of dots, changing the proportions can instantly turn an acceptable image into a complete mess! Better in many cases to put the photographs in at the printing stage and have them done by traditional methods. Above all, it is worth talking to the people who produce your documents by traditional methods. They may talk an alien language of picas and points, separations and screens but they have accumulated the knowledge of several centuries. It is unreasonable to expect a piece of software to turn you and your computer into their equal in a matter of weeks or even months. Don't be too proud to have a designer come and help design the basic pages you need. Most DTP systems have the advantage of a degree of flexibility that most printers and designers simply cannot believe. Remember, though, that this often means that you'll make bigger and better mistakes in even shorter time...

Henry Budgett is the Publisher and Editor of the Desktop Publisher - the U.K.'s first DTP Newsletter. He can be contacted at: The Desktop Publishing Company. 43 Hithermoor Rd, Stanwell Moor, Middx. Tel 0753 684633. BT GOLD 83:JNL260

Hebrew Tools for the Mac

גבול לפניך
FRONTIER AHEAD

reviewed by

Bernard S. Jackson

Hebrew word processing presents a number of technical problems. Hebrew is written right to left, but often needs to be interspersed in an English text (written left to right). The script itself consists in letters which represent consonants, while the vowels (in fact normally omitted from texts other than for children and liturgical uses) are various combinations of dots and other signs printed under, over and occasionally in the middle of letters. There are numerous public domain Hebrew fonts available, many of them rather elegant, but without a specially designed word processor they are difficult to use: the cursor has to be replaced after each letter or, if the words are typed in backwards, each word. To meet this need, Hakotev™ provides a word processor with right-to-left text entry (and wrap-around), and a complete range of vowels.

Hakotev™, from Eastern Language Systems of Utah, is described as a "visually oriented Hebrew Word Processor", and as such may be thought particularly appropriate for the Macintosh environment. In its ease of use, and the clarity of its Hebrew font, both on screen and as printed by the Imagewriter, it scores highly. It has a very useful internal variant of "Key Caps" - an on screen keyboard which can be used interactively with the text: by selecting a particular letter or vowel with the mouse from this keyboard, that character will appear in the text where the cursor is located. This makes the program extremely easy to use (my thirteen-year-old daughter was well away with it in moments), and no doubt would assist a typist in rapidly learning to access the correct characters from the keyboard itself.

The "Keyboard" Menu allows one to change from Hebrew to English fonts and vice versa. When "English" is selected, the direction of the cursor is reversed, so that the English text can be entered left-to-right, but the right-to-left wrap-around remains, so that the English text gets distorted, if entered in units longer than a line. There is another Hebrew word-processor on the market which claims to be "fully bi-directional and bi-lingual", but I have not yet seen it.

As a word-processor, Hakotev™ has many standard features (copy, cut, paste, centering, go to page no.), and some more advanced features (automatic pagination and page-numbering, font scaling from 2 to 127 points, adjustable line spacing). But it also has considerable limitations. For example, different font sizes and page formats cannot be mixed in a single document, and this includes different margin settings (so that indented text has to be produced by tabs and carriage returns for each line individually). Identical quotation marks (both single and double) have to be used at the beginning and end of quotes. There is no justification, even of English text; no style options (bold, italics, etc.), no subscripts or superscripts.

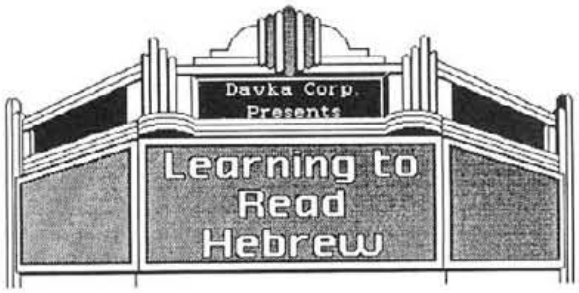
The result is that the usefulness of Hakotev™ depends very much on the extent to which Hebrew text produced in it can be transferred to other word-processors. However, the demo version sent for review was so tailored as to inhibit proper testing of some of these (and other important) features, no doubt to reduce the attractiveness of the demo version to copyists. There is a "Transfer" menu, with two options: "Copy to System Clipboard" and "Save as text only". The former is simply inactive; the latter announces "You can save a document as 'text only' and then open it in other Macintosh applications" - but doesn't allow you to do so. This requires copying the Hakotev™ fonts into the system of the disk with the other application. It looks as if this will result in versions of New York being loaded, with the addition of the Hebrew characters in different positions than in the Hakotev™ keyboard itself, being key positions not otherwise used (my thanks to Conrad Gempf for drawing this to my attention), but this had been implemented on the demo version only for a few letters. Even in the demo version, however, the current screen can be dumped as a MacPaint document (provided MacPaint is also on the disk). Though limited by the size of the screen, this could be very useful in combining Hebrew text with graphics. The screen surrounds can then be edited out with the MacPaint rubber, and the Hebrew text copied to the Clipboard, and thence into other applications. In this way, I succeeded in transferring Hakotev™ text into MacWrite and Word (see the specimen below - the first two verses of Exodus chapter 21 of the Hebrew Bible); of course, it is transferred as a graphic, not a font, and so cannot be edited and will not wrap around in this form. It must be remembered that the fonts thus transferred are screen fonts as in the sample below (although a laser font version is apparently available, we have not had access to this). Thus, a free-standing paragraph of Hebrew can certainly be transferred into a standard word-processing program in this way.

וְאֵלֶּה הַמִּשְׁפָּטִים אֲשֶׁר תָּשִׂים לִפְנֵיהֶם: כִּי תִקְנֶה עֶבֶד
עִבְרִי שֵׁשׁ שָׁנִים יַעֲבֹד וּבַשְּׁבִעִת יֵצֵא לַחָפְשִׁי חִנָּם.

Though three different Hebrew fonts are listed in the Fonts menu, each one defaults to the same Hebrew font (probably "Haifa", though this is not clear). I was not able to test how far the program would work with other Hebrew fonts: though Hakotev™ works with later versions of System than the very old one provided on the demo disk, it would not access the

other Hebrew fonts installed in my later system; nor would it access them when these fonts were installed on the System of the demo disk itself. Moreover, Key Caps is disabled inside the application; on the basis of the demo version (and in the absence of documentation), one cannot be certain that the on-screen keyboard in the full version accommodates other Hebrew fonts, and indicates their correct locations. I have not yet seen a Hebrew laser font in operation, though I hear that one exists. For professional use, it would be essential to verify that Hakotev™ could drive a laser font, and incorporate a screen version of it.

In other notable respects too the demo version falls short of full features, and this necessarily reduces the value of any review. "Search Forward" and "Search Backward" are inactive, as are "Save", "Save as" and "Print", except insofar as the last permits printing of four lines - not enough to test page make-up and the printing of page numbers at the bottom of the page.



Learning to Read Hebrew, from Davka Corporation, is a pleasing instructional program, divided into 14 units (many of them further subdivided). Each combines information screens, multiple choice questions about those screens, reading practices and other tests (quizzes, matching games). The reading samples may be accessed with voice either on or off, and the voice itself may be adjusted for both pitch and speed. The program gives the user considerable flexibility to move about within it according to need: forward or backward within units, choice of order of units, switching voice on or off - although if this last choice is altered in the middle of a sub-unit, one has to recommence that sub-unit from the start (in fact, the units are each fairly short). The phonetic quality of the voice is surprisingly good, although some sounds are more difficult to reproduce than others ('b', unfortunately, is one of the most difficult, yet it occurs within the first unit). Young children probably ought not to use the program without a teacher or parent in attendance, although others could certainly use it as an independent self-instructional package. I found one screen where the voice misread what was written (in the "daled" sub-unit, "bada" is read "bad" - a Freudian error?). One could imagine this kind of program being made more visually attractive for young children, particularly with colour and moving graphics, but as it stands it does its job perfectly adequately.

Davka Corporation have also released a set of graphics, DavkaGraphics, on themes of Jewish interest. 8 documents, which can be opened and printed within MacPaint, are devoted to the following themes (5-10 graphics in each document, examples - not an exhaustive list - given here in brackets): Bar/Bat Mitzvah (boy and girl learning, boy in tallit), Biblical Figures (Moses and the tablets, Noah's ark, Jonah and the whale, Jacob (or Daniel?) and the lion), Holidays (mainly ritual objects associated with different Jewish festivals), Israel (sites in Jerusalem, Masada, portraits of Ben-Gurion, Golda Meir, Theodor Herzl, assorted flags), People (e.g. boy wearing tefilin), Sabbath (candles, kiddush), Signs (some Israeli road signs, a Hebrew Coca-Cola label!!), and Torah (scrolls, an ark with scrolls, a page of Talmud).

Editor's note:

Davka Corporation is a Value Added Reseller based in Chicago. The Corporation specialises in Judaic software for Apple II and Macintosh computers. Over 70 programs are available, and the list is growing. The programs are mainly designed for educational use, including some which enable teachers to create their own computer lessons with no programming experience. However, other topics are covered, including Davka Graphics (from which we have taken all the clip-art used on these two pages) and Synagogue Management Systems for both machines. We understand that all the Apple II software is compatible with the IIGS.

Prices (excluding postage & packing) for the products included in Bernard's review are:

Learning to Read Hebrew $39.95
DavkaGraphics $34.95
Available from Davka Corporation, 845 N. Michigan Avenue, Suite 843, Chicago, Illinois 60611, USA.

Hakotev word processor $99.00
Hebrew laser font $99.00
Available from Eastern Language Systems, 240 East Center Street, Provo, Utah 84601, USA.

MULTISCRIBE Will change the way you use your Apple II. Forever...

MultiScribe is the first Apple II word-processor to offer true Macintosh-like capabilities. Version 2.0 is designed to work with your //c or 128k //e (with or without mouse), to provide revolutionary word-processing variety. Compatible with most popular Apple II hardware enhancements, MultiScribe received a ♦♦♦♦♦ Apple review award from Nibble Magazine, (their highest accolade).

MULTISCRIBE 2.0 £54.99

Easy to use Macintosh-like interface including pull-down menus, dialog boxes, scroll bars, quick file access, and windows.
Place headers & footers in your MultiScribe documents with new Show Header & Show Footer commands.
Set Page Length and adjust top & bottom margins with new Page Setup feature.
Installs easily into RAMworks & other memory expansion cards, and will also take your old AppleWorks files and give them a new lease of life.
New font select command lets you load fonts from different drives & directories.

Multiple Fonts, character styles, and sizes - some of which, like inverted,uppercase & lowercase, are not even available on the Macintosh! Also; choose from a variety of formatting options and sizes,- including new tall and wide.
What you get is even better than what you see. You can now choose from five print quality options, including MultiScribe's exclusive new Near Letter Quality mode, which prints your fancy fonts and print styles with resolution and clarity superior to any you've seen on a dot matrix printer.
Install optional programs, such as Desk Accessories or Picture Manager.

MultiScribe 2.0 Picture Manager £34.99

Place single or double hi-res pictures into MultiScribe documents with this new on-line accessory. Picture Manager lets you bring your artistic creations right into MultiScribe documents without leaving MultiScribe! Compatable with major graohics programs such as Dazzle Draw, Beagle Graphics, and MousePaint.

You can choose specific portions of your pictures to include and copy up to 15 parts of one or more pictures per document. Pictures cane be moved anywhere within the document, combined with text, or modified with the Font Editor, if desired, giving you a creative edge not even avaialable with MacWrite/Mac Paint.

MultiScribe 2.0 FontPaks - each £18.99

Order additional FontPaks to complement MultiScribe's standard font assortment. Additional fonts are avaialable in five seperate packages of 10 each, complete with a special Font Manager program which allows you to move fonts from path to path & lets you delete fonts from specified paths. (N.B. - only available currently for MultiScribe 2.0 - NOT the GS version).

MultiScribe Desk Accessories £34.99

Includes full scientific calculator, clock, calendar and control panel. Installs onto, & becomes an integral part of your MultiScribe.

MultiScribe 2.0 Spell Checker £34.99

Installs onto MultiScribe 2.0 & provides a 40,000 word dictionary.

MultiScribe GS £88.99

Designed specifically for the 512k GS, MultiScribe GS uses the advanced features of the GS to put Mac-like word processing creativity & flexibility at your fingertips.
Multiple document windows allow you to work with several WP documents at once.
What you see is what you get - an array of fancy fonts & character size appear on-screen exactly as they appear when printed.

Easy, ruler-based text formatting provides centering, justification, multiple-line spacing, paragraph auto-indent, margins, and tabs.
Multiple Print Options give you full ImageWriter & LaserWriter compatability and let you adjust print quality.
Everything you need - find/replace, automatic pagination, headers, footers, and file compatability with other document processors, such as AppleWorks Word Processor.

Full detaila available from:

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News Bytes DTP & WP Special

Apple and Agfa Tango in the DTP Arena.

Apple and Agfa - Gevaert have agreed on an alliance to introduce new products into the DTP Market.
Agfa have announced MacScan which is a high resolution scanner designed for professional use. Other products include a non-impact LED Printer and a new 400 DPI Laser. Agfa are at the forefront of new technology and are expected to release a steady stream of new products over the next year which will further enhance the DTP Market.
Contact: Local Apple dealer

Three new books from John Wiley on DTP

The Illustrated Handbook of Desktop Publishing and Typesetting.

Michael Kleper presents a comprehensive analysis of DTP that covers the entire scope of this innovative technology. In-depth coverage of all the components of DTP on the IBM and Mac and a look at the principles of page design and layout are included.
0830607005 - 800 pages - £23.60
Published by TAB Books.

Desktop Publishing using pageMaker on the Apple macintosh.

Andrew Lucas is an enthusiast but also a pragmatist. You can judge how effective his work is, and eventually your own, by studying this book designed, conceived and produced using the combination of PageMaker and the Mac.
0745102036 - 244 pages - £14.50
Published by Ellis Horwood Ltd

The Desktop Publishing Companion

Graham Jones is a writer and has experience as an editor and journalist. In this book he lays out a clear explaination of DTP and the most effective means of using the new technology. Design, software and help is offered in this new title.
1850580782 - 225 pages - £14.95
Published by Sigma Press.

Details: John Wiley & Sons 0243 779777

New MegaScreen from TVS

T.V.S. have announced two new models in the Mega-Screen range.
he MegaScreen II provides a PAL video output and has a maths co-processor option. Other enhancements include a re-engineered interface board and new software.
The new MegaScreen SE is designed to plug directly into the SE's expansion slot. Both are 19.5" high-res screens and they cost £1,995 + VAT.
Contact: Thames Valley Systems 0734 581829

Page One Book Publishing System.

Macqueen have announced the introduction of Page One, an automated book publishing system for use on the Macintosh. The software is a desktop typesetting product allowing publishers to choose from among fifty book design templates that elimante the need for users to design their own layouts with dtp publishing packages.
The programme is built around F.T.L.'s MacTex typesetting software, which is included in Page One.
The book author creates the manuscript on a Macintosh using Microsoft Word formats and submits it as a set of disks.
After editing the manuscripts on the Macintosh, the publisher chooses one of the templates (which represent standard book designs) from a catalogue and enters its number on a simple screen form along with optional page format information. The publisher then prints the completed pages on any Postscript device.
Page One is designed to bring down the cost factor associated with the publication of books.
Contact: McQueen 031-558-3333

MacSeptember aides DTP.

Several sessions at the MacSeptember conference are being held on DTP - delegates will be able to gain useful advice and compare all the various programmes on offer.
See advert elsewhere in this issue

Lightspeed unveils its colour DTP system.

Colour DeskTop Publishing is in sight with the announcement by Boston software developer Lightspeed of a new package based on the Macintosh II.
The new product allows users to digitise colour photo images with a 300 d.p.i. scanner then layout pages that include line art, typography, and colour photography. users can make colour proofs in minutes using a colour printer.
Target markets are graphic design studios, corporate communications departments, advertising agencies, publishers, newspapers, and magazines.
Details: Lightspeed, 47 Farnsworth St, Boston, MA 02210 USA.

Computers Unlimited takes on SuperMac

North London distributor Computers Unlimited has now been appointed to handle all SuperMac Technology Products in this country. Among the SuperMac products are Super LaserSpool and a range of memory upgrades, large screens and hard drives. Also supported will be the latest add-on boards for the Macintosh SE & II.
The SuperMac 19" SuperView can display up to 1024 x 1236 pixels on its paper-white screen, this is eight times the picture area of the normal Macintosh screen.
An onboard socket allows the addition of an optional 6881 co-processor which speeds floating point operations up to 50 times faster than normal.
Details: Computers Unlimited, 01-349-2395

Agfa release 400 d.p.i. scanner for the Mac

MacScan by Agfa is a professional imaging system offering scanning resolutions of between 72 and 400 dots per inch. The MacScan package includes the S200 Scanner and MacScan software which conforms to the Macintosh Interface Guidelines.
Deatils: Agfa Gevaert 01-560-2131

First 600 d.p.i. PostScript Printer shown in US.

The first 600 d.p.i. PostScript printer has been unveiled in the United States. The machine is from Varityper, a division of AM International. No price is yet available but it is aimed at the professional print bereaux rather than the general DTP market.
The VT600 printer provides typset quality with a speed of ten pages per minute. A 20 Mbyte hard disk allows other typefaces to complement the nine resident fonts. The unit is compatible with the Mac and AppleTalk, and has a PostScript interpreter. No price yet.
Details: Varityper, 11 Mount Pleasant Ave, East Hanover, New Jersey.

DataSpace Corp Launch new Laser-Server.

A new LaserServer which is a hardware multi-user device has been announced by DataSpace. The LaserServer will allow upto 32 users on an AppleTalk network to send print jobs to the Laserwriter simultaneously, buffering each job as it is sent. A massive 80% time saving is reported.
Contact: DataSpace: 185 Riviera Drive, Markham, Ontario, Canada.

WordPerfect on the Macintosh.

WordPerfect Corporation have announced the release in June of WordPerfect on the Macintosh. It will include Macros, Mail-Merge, Footnotes, Spell Checker, and a Thesaurus. Other features include sort, Maths function and file compatability with IBM versions of WordPerfect.

LaserPaint - released.

From the creators of Laserworks comes LaserPaint a DTP system that integrates drawing, painting, text, and paste-up all in one programme. Features include colour seperations, postscript output, and accuracy required by graphics designers.
Contact: D.O.S. Ltd Ahuza 141, Raanana, 43373 Israel

Compiled from press releases and MacExpo Rotterdam visit.

Program Writer

Write better BASIC programs with this new product from Beagle Bros, reviewed here by Dave Ward.

Comparing Applesoft BASIC with BASIC languages on other machines you are soon acquainted with the poor editting features of the former! Ever since the Apple)(computer was introduced in 1976 third party software manufacturers have published editors to make the life of the Applesoft programmer more bearable.

Program Line Editor (PLE) by Neil Konzen was one of the first and perhaps the most popular. PLE was soon superseded by Global PLE (GPLE). Since 1980 I have used both PLE and GPLE although I've tried other editors some of which were marginly better than GPLE. However, none were sufficiently better to make me wish to change. When asked to review this product I thought 'not another'! but Program Writer is something different.

Program Writer is published on a 5.25" diskette with a 22 page but quite comprehensive manual plus a command card. The diskette boots up into ProDOS with the following CATALOG:-

The diskette is, however, a ProDOS/Dos 3.3 'hybrid' and when booted produces thefollowing screen menu :-

```
          PRODOS
      PROGRAM WRITER
  COPYRIGHT 1985, ALAN BIRD
VERSION 1.0/JANUARY 2, 1986
 1. INSTALL EDITOR
 2. INSTALL LANGUAGE CARD EDITOR
 3. INSTALL SMALL EDITOR
 4. RUN CONFIGURE PROGRAM
 5. RUN DEMO
 6. SWITCH TO DOS 3.3
 7. QUIT
```

Choosing option 6 converts to Dos 3.3 with the menu below :-

```
          DOS 3.3
      PROGRAM WRITER
COPYRIGHT 1985, ALAN BIRD
1.  INSTALL EDITOR
2.  INSTALL LANGUAGE CARD EDITOR
3.  INSTALL SMALL EDITOR
4.  RUN CONFIGURE PROGRAM
5.  QUIT
```

```
EDITOR/

NAME              TYPE   BLOCKS  MODIFIED          CREATED           ENDFILE   SUBTYPE

**************** $00        0  <NO DATE>          <NO DATE>               0
*                * $00        0  <NO DATE>          <NO DATE>               0
*PROGRAM WRITER* $00        0  <NO DATE>          <NO DATE>               0
*COPYRIGHT (C) * $00        0  <NO DATE>          <NO DATE>               0*
*     1985      * $00        0  <NO DATE>          <NO DATE>               0
*                * $00        0  <NO DATE>          <NO DATE>               0
* BY ALAN BIRD  * $00        0  <NO DATE>          <NO DATE>               0
*                * $00        0  <NO DATE>          <NO DATE>               0
* THE SOFTWARE  * $00        0  <NO DATE>          <NO DATE>               0
*    TOUCH       * $00        0  <NO DATE>          <NO DATE>               0
*                * $00        0  <NO DATE>          <NO DATE>               0
**************** $00        0  <NO DATE>          <NO DATE>               0
                  $00        0  <NO DATE>          <NO DATE>               0
*PRODOS           SYS       30  30-DEC-85 12:15   22-OCT-85  6:51   14848
*BASIC.SYSTEM     SYS       21  30-DEC-85 12:15   15-OCT-85 14:15   10240
*DOS.SYSTEM       SYS       19  30-DEC-85 12:15   15-OCT-85 14:16    9216
*STARTUP          BAS        4   3-JAN-86 16:48   16-OCT-85 11:07    1401
*CONFIGURE        BAS        9  31-DEC-85 16:13   16-OCT-85 11:08    3867
*DEMO             BAS       12  30-DEC-85 12:13   21-OCT-85 17:04    5432
*DEMO.ML          BIN       13  30-DEC-85 12:13    7-NOV-85 16:27    5888 A=$4000
*EDITOR           BIN       23  31-DEC-85 16:19   31-DEC-85 16:19   11075 A=$4000
*EDITOR.SMALL     BIN       11  31-DEC-85 16:19   31-DEC-85 16:18    5016 A=$4000
*EDITOR.LC        BIN       24  31-DEC-85 16:19   31-DEC-85 16:18   11477 A=$4000
*MACROS           BIN        3  30-DEC-85 12:13   15-OCT-85 14:32     960 A=$961E
*MACRO.PRINTER    BAS        5  30-DEC-85 12:13   14-DEC-85 12:45    1923

BLOCKS FREE:   11     BLOCKS USED:  269     TOTAL BLOCKS:  280
```

Under both operating systems there are three main versions of the Editor :-

1) Standard Editor - which takes up main memory below Dos or ProDOS.

2) Language card version - which loads into the second 64K memory bank in 128K Apple //e , Apple //c and Apple IIGS computers. In 64K Apples including the Apple)(plus it tries to load into the language card. This version does not take up any main memory.

3) Small Editor - which takes up much less memory and would be mainly used where main memory is at a premium, the language card is not present or unavailable. Many of the most useful commands are omitted in this version.

You simply install the Editor of your choice from one of the above menus or by entering BRUN EDITOR.LC when the Applesoft) prompt appears. When the Editor is installed it prints a message and then falls into Applesoft. At the) prompt you can load your Applesoft program. Entry into the Editor is simply achieved by typing && followed by 'RETURN'. A typical screen is shown at the top of the next page note the bottom line where the FREE memory is shown on the right is the COMMAND LINE. This is used for the entry of 'text' to FIND etc.

Moving the cursor.

As you can see the Program Writer Editor is a screen editor which works just as if the program listing were part of a much larger text file in AppleWorks. The screen is in fact a window on the whole listing. The author, Alan Bird, has tried to make the cursor and editting commands as close to those used in AppleWorks as possible. Simple cursor moves can be made with the arrow keys and like AppleWorks the up/down arrow keys + the Open-Apple key (OA-) cause the listing to move by a whole screen in the direction chosen. The OA- + left/right keys cause the cursor to move to the next word in that direction.

As in AppleWorks the OA-1 keys cause the cursor to the beginning of the file and the OA-9 keys to the end of the file. Digits between 1 & 9 cause the cursor to move proportionally within the file. If you have a mouse the Editor allows you to move the cursor at will all over the screen. If you attempt to move the cursor beyond the top or the bottom

```
 1 IR =  PEEK (175) + 256 *  PEEK (176) + 169: GOTO 50000
 2  RETURN
 3  POP : GOTO 21
 4  POP : RETURN
 8  ON F%(F%) + 1 GOTO 20,2: STOP
 9  PRINT "Saving the ED - please wait": PRINT  CHR$ (4)"SAVE ED": PRINT
"Saved the ED PROGRAM": END
 10  GET K$:K =  ASC (K$):K = K - 32 * (K > 96 AND K < 123):K$ =  CHR$ (K)
PRINT : RETURN
 15  PRINT D$"COPY" + P0$ + F$ + "," + P1$ + F$: RETURN
 20 F%(F%) = 1: PRINT D$"OPEN"F$(F%): RETURN
 21  PRINT D$"CLOSE"F$(F%):F%(F%) = 0: RETURN
 22  GOSUB 8: PRINT D$"READ"F$(F%): RETURN
 23  GOSUB 8: PRINT D$"READ"F$(F%)",R"R: RETURN
 24  GOSUB 8: PRINT D$"WRITE"F$(F%): RETURN
 25  GOSUB 8: PRINT D$"WRITE"F$(F%)",R"R: RETURN
 26  CALL IR"MAT ZER",F%(0): PRINT D$"CLOSE": RETURN : REM == "Closes all ==
 30  CALL IR"PRINT USING","      ";NU;: RETURN
 32  CALL IR"PRINT USING","    0.00";NU;: RETURN
 33  CALL IR"PRINT USING","   0.000";NU / 100;: RETURN
 39  CALL IR"PRINT USING",FM$;NU;: RETURN

                                                    FREE: 17649
```

of the screen the listing scrolls in the appropriate direction. Pressing the mouse button also causes scrolling and the direction depends whether the cursor is in the top or bottom half of the screen. This is rather a nice feature.

When editting Applesoft programs you will most likely want to edit a particular line. You can jump to a line of your choice by entering OA-J when you will be prompted for a number. Pressing 'RETURN' has two effects, firstly the cursor will move to the start of the next line with a number and secondly ALL the line will be accepted.

TAB - moves the cursor 8 characters right
OA-TAB - moves the cursor 8 characters left
OA-B - moves the cursor to the beginning of the file
OA-N - moves the cursor to the end of the file

Editting.

Just like AppleWorks there are two cursors; a white box and flashing underline for replace/insert modes respectively. These may be toggled with OA-E. Clearing from cursor to end-of-line is accomplished with OA-Y.

When you edit a line a + cursor will appear. Whilst this cursor is present you can reinstate the original line by pressing ESCape.

Deleting characters can be achieved by pressing Delete or OA-Delete. Line or lines can be deleted with OA-D.

Other commands allow one to change the case of the text and lines can be split with OA-T.

Cut and Paste.

Program Writer has cut and paste operations but they are different than those in AppleWorks.

Move the cursor to the start of the text you wish to 'cut' and then press OA-C then move the cursor to the end of text to 'cut' this will be highlighted in inverse. Then press return. To paste just move the cursor to the start and press OA-P.

Adding lines.

This can be accomplished by entering OA-I when a blank line is produced with the + cursor. You can then enter a whole line including the number. OA-A invokes auto-line numbering. When you have entered all the lines that you desire just press ESCape.

Find/Replace.

Like all good wordprocessors the Editor in Program Writer has an excellent Find/Replace facility. These are invoked by OA-F and OA-R respectively. You can back out at any time by ESCaping. Features such as single/multiple wild cards, case sensitive text, next character a digit , are just a few.

Renumber.

Program Writer let's you renumber parts or all of your program by entering OA-#. You will be warned if there is a conflict and the renumbering will not take place.

One note of caution, however; if your Applesoft program has machine code attached at the end of the program it will be lost on renumbering. Since all my Applesoft programs have such machine code appended I can't use this feature : but then I've never found the need for renumber anyway!

Miscellaneous commands.

OA-V lists all the variables in your program in only a few seconds even for long programs.

OA-K invokes the calculator mode. Any arithmetical expression in standard Applesoft format will be evaluated.

OA-X toggles screen between 40 & 80 columns.

OA-Q exits the Editor to Applesoft) . This is necessary to enable you to SAVE and LOAD your programs. Do save your programs often during editting. Remember you can re-enter the Editor with **&&** 'RETURN'.

Macros.

As you might expect the Program Writer has a good macro capability. In fact macros are stored as files on diskette, each file can contain 26 macros (A-Z). Command 'keys' associated with macros are as follows:

OA-G This requests the name of the macro file that you wish to load.

OA-M Allows you to edit a particular macro.

OA-S This will save your current macros to diskette as a file.

Macros are invoked by pressing the closed-apple key and the appropriate (A-Z) key simultaneously. You are limited to 37 characters per macro but macros may call other macros.

On the Apple)(plus one is able to use control keys to simulate the special keys only available on the Apple //e, Apple //c and Apple IIGS computers. For instance control+Z = closed-apple.

Buy an Apple IIGS Monochrome System from Holdens at £995.00

- and you'll get more than you bargained for!

Q. What's the difference between the IIGS on the left and the IIGS on the right?
A. The one on the right is supplied by Holdens and has an Apple 1MB Ram Card fitted!

Most of the spectacular programs designed only to run on the GS require at least 512K of Memory. GraphicWriter and PaintWorks are two such programs. As more and more powerful applications are produced for the GS then the need for a large RAM Card grows. The GS uses 800K disks, and it is often desirable to be able to dump the entire contents of a disk on to a RAM Card. The answer to all these problems is to fit a 1MB Ram Card in your GS.

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*

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It is a pity that one has to leave the Editor to save your editted program and then return to the Editor. This might cause users not to save their amended programs often enough!

(As a note I was fortunate enough to be reviewing this product on an Apple IIGS with Diversi-KEY. Diversi-KEY is an interrupt driven macro facility with 320K space and upto 100000 macros. I was able to easily construct a macro that would allow me to save and load Applesoft programs for editting without apparantly leaving the Editor We will be reviewing Diversi-KEY soon.)!

Conclussion

I was unable to find any way of printing information, when in the Editor, to the printer. It would be nice to be able to get a hard copy of the variable list, for instance.

In conclusion Program Writer is an excellent Applesoft screen editor which is also very fast.

Program Writer would be very good value at £49 + VAT but there is a free program on the back of the diskette - **ProBASIC**. Since this is a review of Program Writer we will not dwell to long on ProBASIC but here is a mini review!

ProBASIC Mini-Review

ProBASIC is a highly modified Pro-DOS operating system that enhances Applesoft BASIC by allowing you to make 'modules' which can be attached to your main BASIC programs.
Full documentation is included on the diskette in the form of six Apple-Works word processor files. When you boot the diskette you are presented with a few screens describing ProBASIC followed by a menu :

1. RUN INSTRUCTIONS
2. INSTALL EDITOR
3. RUN BOXES (DEMO)
4. RUN TOWERS OF HANOI (DEMO)
5. RUN TURTLE GRAPHICS (DEMO)
6. QUIT

The EDITOR is a special version of the Program Writer Editor !!

Modules are either BASIC subroutines that your MAKE or relocatable assembler code files. There are a library of modules on the diskette and some pre-defined system modules that are essential. These system modules are :-

HELP which lists all modules used by a program
EDIT which lets you edit & list BASIC modules
MAKE creates a BASIC module
ELSE extends Applesoft IF THEN
PARM lets you pass values to and from modules
EXIT the return at the end of a module

Two additional ProDOS commands are added :

MODLOAD loads modules from disk
MODSAVE saves modules to a disk

You must have a main program and this can be a standard Applesoft program if you like. However it may call modules.

Alan Bird the author of ProBASIC has added a nice feature for those wishing to use hi-res graphics. One of the problems with Applesoft is that long programs can be overwritten by the hi-res graphics if they stray into those memory areas. So always type New for a new main program and here are the options:-

NEW TEXT specifies that all memory can be used with no hi-res graphics
NEW HGR this reserves the first hi-res page for hi-res graphics
NEW HGR2 reserves both hi-res graphics pages.

Let's make a simple module to square numbers !

```
MAKE SQUARE
10 PARM X
20 Y = X * X
30 EXIT Y

SQUARE 5
25
```

Notice that SQUARE is now a ProBASIC statement !!

Variables used in modules are usually local so that the module may be used in almost any program you want without variable conflicts.

To make assembler modules you will need to know the mechanics of Applesoft and they must be relocatable .

As is usual with these type of utilities, Alan Bird, has supplied modules that are a 'tour de force' ; here are a few :-

VIRTUAL
This module will store up to 20 arrays with a maximum of 4 dimensions each on disk so that no main memory is used!! For those who require huge arrays that cannot be accommodated in memory a large RAM disk or hard disk can be used.

DISK
This specifies that the module will be stored on disk and loaded from the disk whenever it is referenced in your main program. This saves main memory for rarely used modules.

INC
You can increment variables more quickly using this :

A(53-C+D) = A(53-C+D) + 1 Can be replaced by INC A(53-C+D)
Note you can also use the construct IF INC X > 4 THEN 200

In conclusion ProBASIC is a nice product to get free! Perhaps we will do a full review of the product if members so wish.

Program Writer

Review copy from:
Bidmuthin Technologies
P.O. Box 264
Harrow
Middlesex HA3 9AY
01-907-8516

Eight Rules when dealing with Floppies by Beagle Bros.

Apple ⇔ IBM
1. The Apple Turnover

Roger Larcombe looks at two alternatives for moving data between these machines.

For those of you using not only Apple systems, but also IBM or compatible machines there is a definite dilemma. Do you just keep the systems separate and run them side by side or do you trade in your trusty Apple and upgrade to the IBM standard?

Of course many of us are put in this position by using one machine at work and another at home; wouldn't it be nice to have the best of both worlds - bring your MS-DOS files home and edit them using Appleworks?

To keep you in the Apple fraternity here is a product to allow transfer between the two systems. Made by Vertex Systems Inc., it's called the Apple Turnover and permits transfer in both directions although it does work only in the IBM machine.

The hardware

The Apple Turnover consists of a printed circuit board and a disk of software, which all comes neatly packaged with a superb manual in a sturdy hinged rigid plastic box, which is just about the right size to fit your bookshelf once you've finished using it. The pcb is used inside your IBM to intercept the signals between your existing disk controller board and the disk drives themselves, note that you can use this with a hard disk but it will be most successful and reliable when used between two floppy disk drives.

Installation

Installation is fairly simple depending upon what type of machine you have, and the manual explains exactly how to do it in the various IBM's and clones which are supported. This basically consists of taking all the expansion cards out of the slots and moving them up one slot to make room for the Apple Turnover card between the existing disk drive controller and the disk drive. In my case I was fitting it into a Compaq portable and the instructions worked out exactly as described (shock horror!!). The card is otherwise transparent to the system though always available at your command.

With the card successfully installed, I went to work on the programs, and began by backing up the program disk as instructed in the manual and transferring the MS-DOS system onto the disk. (Like some Apple disks the system tracks are normally left off so as to save the software vendor paying license fees to the DOS copyright holder). Now I put my master disk safely away and booted the backup, a text screen appeared telling me how to invoke each of the programs on the disk. The tutorial in the manual gives a peculiar kind of 'roadmap format' as they call it to lead you around the menu's which I found rather confusing and ended up just giving it a try, leaving the manual for emergencies only.

Software

The disk holds a series of prog-rams to perform a range of functions automatically for you, and these programs are named appropriately as follows ;

ATREAD	*reads an Apple disk into IBM format.*
ATWRITE	*writes MS-DOS files onto Apple disks.*
ATINIT	*initialises Apple format disks.*
ATSIFT	*sifts through MS-DOS files stripping or adding high bits (useful for Apple text files), removing or adding carriage returns etc etc.*
APPLPEEL	*removes binary file headers from Apple files.*
UNPEEL	*adds binary file headers to Apple files.*

The programs will work on all of the usual Apple operating systems including DOS 3.3, ProDos, Apple Pascal, Softcard CP/M format and even Apple III SOS. I found this frankly surprising but it did all work!

To test the card thoroughly I went through a series of file transfers in all directions, ranging from moving Appleworks word processor files to various MS-DOS word processor files including WordStar 2000, Integrated 7 and Word Perfect, similarly moving WP files back in the other direction, right through to transferring several CP/M COM files from Apple to IBM and still making them work O.K. It should be borne in mind of course that not all COM files will transfer this readily, and some may not then still work on the new machine. All the above transfers went relatively easily, the programs are fully menu driven allowing you to alter disk formats, drive parameters and various other options simply by pressing keys.

Minor problems

The only problems I found were when it came to moving special files such as WordStar text files or binary images, where special characters are either embedded in the text or deliberately missed out. In some cases the high bit of text files has to be always set or unset according to the operating systems parameters (Apple text files always have the high bit set, MS-DOS do not). Apple binary files under DOS 3.3 for example always have a 4 byte header attached to the front end to tell DOS where to load them and how long they are, again MS-DOS does not use this and will simply see it as 4 extra bytes.

However after a brief and helpful chat with the dealer who supplied the equipment I was soon dispatched back to the manual where all was explained. These and many other problems were adequately dealt with in the manual, indeed a lot of trouble was taken to explain just how disk file formats are organized in the different operating systems so as to help the user understand. Special detail was given to WordStar files and binary files which have specific problems and advice is given as to how to deal with individual problems.

How good is it

All in all I found the product easy to use once successfully installed, which

continued on Page **50**

Apple ⇔ IBM
2. Asky Envoy

As a follow up to the previous article on the Apple Turnover board fitted to an IBM machine, this review now presents an even simpler way to swap those files around between MS-DOS and Apple ProDOS and also to give greater disk storage capacity on your Apple. Its called the Envoy controller board and is manufactured by ASKY, a California based firm.

The product is in its early stages at present and the manufacturer is working frantically on a range of enhancement products which will give such luxuries as automatic conversion from Lotus 123 to Apple-works formats and much more. Unlike the Apple Turnover card, this device will not (yet) allow transfer of software as such, because the processor won't run most of it, but co-processor cards are on the horizon so watch this space. To run The Asky Envoy you will need an Apple II+, IIe or IIGS and ProDOS.

The Envoy Card

The concept of the Envoy controller card is that it forms a new and additional disk controller card within your Apple II series machine. However this is no ordinary drive controller as it can operate up to four double sided drives and each of these can be either 135 tpi 3.5" drives or 48 or 96 tpi 5.25" drives giving a maximum disk capacity via this controller card of 3.2 Megabytes! It will work in any slot of a IIe but 4 to 7 are recommended. Unfortunately it won't work with the existing Apple drives as these are single sided, but it will work with virtually all types of IBM compatible disk drives (usually cheaper to buy than Apple drives anyway). The drives connected to the Envoy board won't recognise Apple formatted disks nor will the Apple drives recognise Envoy formatted Apple DOS disks but you can make up to 800K bootable Apple disks available via the Envoy.The board arrived well boxed and with a manual and the appropriate cables to link up a single IBM drive, for the purposes of the review I was also lent a 5.25" double sided 48 tpi disk drive (360k formatted capacity) and I had one similar drive recently removed from an IBM compatible machine and both were tested. The card comes with a power cable to connect up one disk drive direct to your Apple but ASKY recommend that you purchase a separate power supply even for the one drive, although I didn't have any problems in my Apple IIe using the single drive. If you are intending to use the system for extensive disk capacity increase you will need to purchase suitable power supply units with the drives, the dealer who supplied the Envoy card to me has a range of options for the various different configurations you may require.

The instructions explain how to install the controller card and slot 7 is recommended for the initial checkout. A four pin Molex connector allows power to be fed to the first disk drive if required via a supplied cable about a yard long which was more than adequate for most likely drive locations. Similarly the data cable supplied is about a yard and unlike the normal Apple ribbon this one is 34 way as all IBM drive cables are. Once all the cables are away and the lid back on your Apple you are ready to boot up the system.

The Envoy of course being in slot 7 takes priority on boot up and its internal ROM program gives you a welcome message on the line beneath the Apple IIe message. The Envoy searches its connected drives for a boot file first and subsequently passes control on to the normal controller if it finds no active disks. Owing to the greater sophistication of the IBM drives the controller can quickly tell if the door is open and if you do this then after about a 1-2 second delay the normal disk drive will start it's boot routine, thus giving an easy route to normal boot disks and other operating systems.

Software utilities

The programs on the disk are the Envoy diagnostic utilities (these were version 1.0) and they operate under ProDOS 8. The program immediately prompts you to insert a blank diskette in the first Envoy drive and warns you that it will be erased. I inserted the disk and pressed return, the program then ran through tests to see if the drive is fully compatible with the controller, this usually means whether or not it is set up correctly. The tests are ; check sum, track register, sector register, data register, index flag, not ready, ready transmission, track 0 flag, drive select switches, partial format and read/write. Several attempts at the tests always crashed out at the same point - Ready trans - and this told me I had problems, so I consulted the documentation (always a last resort).

Several diagrams are given for various drive pcb layouts showing jumper positions. Unfortunately one of the drives I had did not conform to any of the diagrams, so a quick phone call to the dealer and a couple of jumpers swapped and I was back working again. The reason for this jumper swapping is that apparently some drives do support a 'drive ready status' bit and some don't; those that do have a jumper for selecting it, and also drives are cable daisy chained with jumpers determining which is which.

What does it do

Now the system is running - what can we do with it? Well first of all you can format blank or even bootable ProDOS system disks without any special software at all. To try this I booted the ProDOS system disk from my 5.25" Apple disk, entered the ProDOS filer, typed 'v' to select volume commands, then 'f' for format and finally entered the drive details (ie 7 for the slot and 1 for the drive) and a volume name. ProDOS at this point gives you a Warning that you are about to format a large disk (presumably in case you were about to format a fixed drive), but if you press 'y' to confirm then the disk drive spins into action and formats the floppy. I now listed the volume to find a wonderful 793 blocks of storage available! This compares to the normal 280 for us Apple drivers! To me this was a staggering piece of information, like using a Unidisk I suppose except that I didn't need any special software, just the normal Filer. Also I could have had up to 4 drives on line and each could be up to 800K capacity.

Next on the agenda was to test the ability of the system to read, write and transfer data to and from IBM or MS-DOS diskettes. I had the use of an IBM machine and an Apple side by side so testing the disks was very easy. The conversion utility program is supplied on a ProDOS format disk

APPLEWORKS AND IIGS APPLEWORKS 2 EXPANDER

The Appleworks 2 Expander is an enhancement program for Appleworks 2 which enhances and expands Appleworks 2 when used with certain memory cards.

Here's a list of the AppleWorks enhancements created by the AppleWorks 2 expander when used with GS-RAM Plus cards on the IIGS:

- ✳ Word Processor and database Clipboard expanded to 2,042 lines (versus 250)
- ✳ Up to 22,600 lines in the Word Processor (versus 7,250 lines)
- ✳ Up to 22,600 records in the Data Base (versus 6,350 records)
- ✳ Variable size printer buffer
- ✳ On-screen time display
- ✳ Automatic time/date entry into the database
- ✳ Print-file cache (i.e. ALL of AppleWorks is loaded into memory - so doesn't access the disk to print)
- ✳ Expander options menu
- ✳ Multiple disk file-saving capability
- ✳ AppleWorks Desktop expansion to 8 Meg

Other features: GS-RAM and GS-RAM Plus are totally compatible with and surpass the Apple GS Memory card standard.

The AppleWorks 2 expander is supplied FREE with GS-RAM and GS-RAM Plus.

Prices (excluding VAT)

GS-RAM 256K	£169.00
GS-RAM 512K	£209.00
GS-RAM 1 Meg	£269.00
GS-RAM 1.5 Meg	£319.00
GS-RAM Plus 1 Meg	£399.00
GS-RAM Plus 2 Meg	£629.00
GS-RAM Plus 3 Meg	£849.00
GS-RAM Plus 4 Meg	£1059.00
GS-RAM Plus 5 Meg	£1259.00
GS-RAM Plus 6 Meg	£1419.00
GS-RAM Plus 7-8 Meg	£CALL
256K Upgrade Kit	£40.00
1 Meg Upgade Kit	£240.00

The AppleWorks 2 Expander also works with, and is supplied FREE with these other memory cards:

for IIC

Z-RAM Ultra 2 - 256K	£269.00
Z-RAM Ultra 2 - 512K	£309.00
Z-RAM Ultra 2 - 1 Meg	£389.00
Z-RAM Ultra 3 - 256K	£329.00
Z-RAM Ultra 3 - 512K	£369.00
Z-RAM Ultra 3 - 1 Meg	£449.00
65C816 16 Bit Option	£79.00

Enhancements as for GS-RAM and GS-RAM Plus but maximum desktop is 727K (1 Meg Z-RAM Ultra) and printer buffer is fixed at 64K. The in-built clock also provides file date/time stamping as well as other time options. AppleWorks is fully pre-loaded into RAM. Also provides most of the enhancements for ALL earlier versions of AppleWorks.

Other facilities: 16-Bit Option, clock
Z-RAM Ultra 3 includes Z-80 co-processor and CP/M.

for IIe

256K Ramworks III	£199.00
512K Ramworks III	£239.00
1 Meg Ramworks III	£319.00
1.5 Meg Ramworks III	£469.00
3 Meg Ramworks III	£1,299.00

All products are also available from your local dealer.
All products carry a ten-day no-quibble "money back if not delighted" promise plus a one year guarantee.
Ordering information: Add £1.00 P&P per order + VAT @15%

BIDMUTHIN Technologies implementing your ideas

Enhancements as for Z-RAM Ultra, but separate clock (e.g. TimeMaster or SerialPro) required for time/date features and printer buffer only works with Super Serial Card (or SerialPro).

Other features: 80 column display built in. (Replaces 80 col card). RGB option, for IIe

256K RamFactor	£239.00
512K RamFactor	£269.00
1 Meg RamFactor	£319.00
RamCharger Battery Back-Up	£179.00

Enhancements as for GS-RAM but no printer buffer and separate clock (e.g. TimeMaster or SerialPro) required for time/date features. Max desktop 1 Meg.

Other features: Allows AppleWorks V1.3 to run on II+. Also enhances AppleWorks V1.3 on IIe. Battery back-up option for permanent data storage, can boot from RamFactor, on-board partitioning firmware. Functions as full RamDisk on GS,e & +.

OTHER HARDWARE

Heavy Duty Power Supply (e/+)	£75.00
IIc System Clock (c)	£49.00
Phasor Music/Speech Synthesizer (e/+/GS)	£179.00
Pinpoint Apple IIe Enhancement Kit (e)	£29.00
Pro-Apple 20 Mb Hard Disk (IIc/GS/e,Mac,Mac+)	£995.00
SerialPro - Serial Card + Clock (e/+/GS)	£139.00
TimeMaster II H.O. Clock (e/+)	£99.00
TransWarp Accelerator (IIe/+)	£279.00
Viewmaster 80 (80 cols on II+)	£139.00
Z-80 + Card inc. CP/M(GSS/e/+)	£139.00

IIGS SOFTWARE

AutoWorks 2.09 - Macros etc. (GS/e/c)	£49.00
DazzleDraw - dble hi-res graphics (e/c)	£69.00
Document Checker - fast spell checker (GS/e/c)	£69.00
FontWorks - for AppleWorks (GS/e/c)	£49.00
InfoMerge - for AppleWorks (e.c)	£29.00
Keyplayer Macros (reqs Pinpoint)(GS/e/c)	£49.00
MultiScribe - GS Wordprocessor (GS)	£99.00
MultiScribe 2.9 Wordprocessor (e/c)	£69.00
PinPoint 2.0 - Desktop accessories (GS/e/c)	£89.00
PinPoint Toolkit (inc RunRun)(GS/e/c)	£69.00
Point-to-Point - Communcations (GS/e/c)	£99.00
ProBasic w. Program Writer (GS/e/c)	£49.00
ProFiler - Database (GS/e/c)	£99.00
Quark Catalyst 3.0 - Mac-like Desktop mgr (e.c)	£49.00
RamDrive (Dos3.3/ProDos/Pascal/CP/M) each (e/c)	£29.00
Ram Enhancement/Management Kit (e/c)	£29.00
RunRun - Desktop Manager (e/c)	£49.00
Spelling Checker (reqs Pinpoint) (GS/e/c)	£69.00
TopDraw - Graphics for GS (links w. MultiScribe)	£99.00
VIP Professional - (e/c) (Lotus 123 on e/c)	£199.00
VIP Professional - GS (Lotus/Excel on GS)	£249.00
Visicalc Expander Disk (e/c)	£29.00
Visualiser - e/c - Graphs AppleWorks (e/c)	£79.00
Visualiser - GS - Graphs AppleWorks (GS)	£89.00

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Telex: 8950511 ONEONE G (Ref:22554001)

Asky Envoy

- *continued from Page 48*

and is designed for converting MS-DOS to ProDOS and vice versa. there is no utility yet for DOS 3.3 but one is said to be coming, meanwhile I used Ewen Wannop's Chameleon to easily achieve this second transfer. Running the program gave an 80 column menu with the following options ;

1> *Reverse transfer direction.*
2> *Display MS-DOS directory.*
3> *Display ProDOS catalog.*
4> *View MS-DOS file.*
5> *View ProDOS file.*
6> *Transfer files.*
7> *Help.*
8> *Quit.*

The current direction of transfer is displayed as MS-DOS to ProDOS, the default. The directory listing utilities appear extremely quick in use and no discernible difference is apparent between either disk operating system. Disk types can be swapped at leisure without problems. I viewed one MS-DOS text file and felt sure that it was displayed on screen virtually as fast as it would be on an IBM.

File tranfers

Now for a file transfer, selecting option 6 from the menu gave a prompt for the drive number, when this is entered the source filename is requested, you must know this before you begin as there is no wildcard support. Next the program requests the target file pathname, once this is done file transfer takes place at lightning speed a 26k text file taking just 18 seconds. One good reason for this speed is that both drives appear to run continuously and simultaneously saving the usual flickering of LED's and waiting for drives to get up to speed each time. This is presumably a side effect of having the two separate controller cards. Transfers in the other direction worked OK with straight text files but some weird things happen with carriage returns and the like, so watch out for WordStar files!

Conclusions

In conclusion I would say that this is a good innovative product which could bring not only vast amounts of expandable floppy disk storage to the Apple II user but also some level of file compatibility with MS-DOS users especially for those who take their work home.

The prospect of using the card for booting up large ProDOS volumes, and I might add at far greater speed than the normal drives, is very attractive indeed giving an effective alternative to Unidisk and the like.

The product is a high quality one and it works well, couple this with a good dealer for support and you can't go wrong.

The card and much advice and help were obtained from ;

MGA Microsystems Ltd.
140 High Street,
Tenterden,
Kent. TN30 6HT.
Tel: 05806-4278

Price is £149 plus VAT and carriage for the card and software itself, and don't forget to add to that the disk drives depending upon what you want to use, generally though 5.25" 360k drives as used in this review cost about £100 + VAT each and 3.5" 800k drives cost about £150 + VAT. Also you will need a suitable power supply and leads at a cost of roughly £40.

The Apple Turnover Card

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some users of IBM machines may not like to do for themselves, however if you are an 'Apple person' then you are used to putting cards in slots and pulling cables around and this won't give you any problems.

The card was found to be totally transparent to all other programs that I used on the computer; even disk snooping programs didn't seem to mind the intrusion of the card between the controller and the drives.

It must be said also that it gave me much more confidence in the product after talking to a helpful and knowledge-able dealer who doesn't immediately put you on hold for 20 minutes or demand to know your user support number.

A Mains control Unit

by Dougal Hendry, our resident boffin

Once, I wanted to control the world with my Apple)(. The "Real World" of harsh and dangerous mains electricity. In those days my)(was essential, so I took no risks. However, if the urge to interface still grips you, read on for a gadget I came across recently.

Mains electricity is seriously different to the train- set voltages on the computer's circuit board. Mains can easily destroy all the chips in the machine. So how can one safely use a computer to switch mains voltages?

The normal safety link between computer and mains is an "*Opto- isolator*". This is a chip- like package containing an LED / Photo-transistor pair, so that there should not be any electrical contact between the two sides of the "chip", the signal being carried by light for a fraction of an inch. However, stray wires, meddling fingers, general incompetence, etc still represent a considerable risk.

A mail order catalogue gave me the idea. It shows a remote control mains switch, which fits between a standard 13 Amp plug and socket, and is operated by a hand- held transmitter. It would be pretty simple, and very safe, to make an Apple)(simulate the pressing of a switch on the battery powered transmitter. (one transistor activated from a games port annunciator should do it).

More important is the compete lack of contact between precious computer and treacherous Real World. Most important of all, it seems cheap at £17-95 per switch and £8-95 for the transmitter, (£24-95 the pair), from **Quorum** on Liverpool 708 5050.

I have no connection whatever with the company, and can accept no responsibility - but I do hope that someone tries it!.

Club Business

Minutes of the Annual General Meeting of BASUG Ltd. held at Spring Grove House, Bewdley on Saturday 4th April, 1987.

The meeting was opened by Jim Panks, Chairman of BASUG Ltd., at 1.30 pm, it having been established that there was a quorum.

1. Apologies for Absence
Apologies were received from Keith Chamberlain and Nick Hunter.

2. Minutes of the last A.G.M.
Tom Wright proposed and John Arnold seconded that the minutes of the previous Annual General Meeting held on Saturday 12th April, 1986, be accepted and taken as read. This was carried unanimously.

3. Chairman's Report
Welcome to this Annual General Meeting of BASUG Ltd. Thankyou for coming along.

Last year I was very optimistic about the future of the group. I outlined the areas we would work on during the year. I am happy to report to the membership that the last twelve months have been the most successful that we have had. The group has changed in many ways, the most obvious was the adoption of the name Apple2000 as our trading name. This together with other major changes have helped the group to become financially stable. Membership over the last year has risen by approximately 25%.

As far as the magazine is concerned continuing improvements in content, design and cost effectiveness have led to Apple2000 becoming a more professional journal. The journal now contains an average of 76 pages, which gives a 40% increase in the amount of information supplied to members. The February, 1987, issue was the largest ever published by the group, with a total of 84 pages.

The design has changed , with colour covers and improved layout, as we master the new DTP technology. We have seen the quality and quantity of advertising increase to a point that we could never have dreamt of a year ago. This has helped in two ways, the first being in our credibility, and the second is on the financial side. As the advertising grows, the magazine contents will improve, and we will be able to add new features.

Now on to the software libraries. As far as the Apple II software library is concerned, this has remained fairly static due to a lack of interest on all sides as the appearance of the GS has captivated the interest of the people who previously were writing software in the public domain for this machine. The first disks have been obtained for the GS software library and the next issue of the magazine will contain details of a whole bunch of demo programs. We are confident that the GS Library will increase as the machines become available and the developers get down to the task of finding out all about the new beast. The Macintosh Library has increased to almost 150 disks and the trend looks like continuing. We are laying plans to sort the disks later in the year.

Over the last year Tom Wright has been busy liasing with local groups all over the country. The number of groups now listed and operating has increased from 16 to 25. Tom has visited local groups as far apart as Mildenhall and Edinburgh. The enthusiasm for new local groups has been fostered by Tom and we hope to expand the help we provide substantially this year.

Apple2000 has over the year managed to negotiate some outstanding special offers for the membership. Our main scoop has been the cheapest hard disk for the Macintosh and Apple II available in this country. Other items have been obtained and we will continue in the coming year.

The Force has been dramatically improved over the last year - Ewen Wannop has managed to delve into the system and produce a menu system. We have also seen the amount of news, downloadable programs, information and interest increase substantially over the year. MacTel has now taken its place on The Force and we will see a further increase in membership. XMODEM will hopefully be available shortly.

BABBS has finished another years operation with increased use and we are now putting into operation a new lease of life for this important shop window to the group. A hard disk and tape back up have been promised from Symbiotic and we hope to have this installed shortly. Tony Game is also arranging to look at new software which will be vastly more powerful and allow many new features. The group will continue to support BABBS.

Our change of name and image was just what we needed and has made it easier to deal with other professional and trade organisations. Our relationships with Apple UK have improved and we have set up the Apple UK IIGS Selector. This will be used by Apple to notify the Dealer network of third party items available for the GS.

The next year will see an increase in services and I would like to announce that Workshops will be re-introduced in June. The membership has asked for more meetings and workshops and we are pleased to oblige. The workshops will be organised around the country and with the help of the trade and local groups - all we ask is that you support them.

We will be introducing a bi-monthly newsletter called Apple Slices in the near future - we hope this together with the introduction of Workshops will ensure a much better service to the members.

I would like to thank the committe for the last year who have all pulled together to ensure the groups success. I would also like to thank the many members who have helped. I would like to say a special thank you to Ann Austin who for two years has dispatched disks to the membership. Unfortunately Ann has had to give this up due to an increased workload. Once again thanks.

4. Secretary's Report.
I am pleased to report to this meeting that I have recently received the final confirmation of B.A.S.U.G Limited's entry under the requirements of the Data Protection Act. This entry is listed on the Register of Data Users and Computer Bureaux under User Number 0012365 and DPR-2 Number 499425. Registration Number B0167203.

The register entry contains particulars of personal data held by B.A.S.U.G. Ltd. for three purposes. The first of these three purposes is Membership Administration and covers the information which is held by the Membership Secretary for the purposes of identifying members of the group. The class of personal data held on the Membership Database is given as personal identifiers such as name and address. The source of these personal identifiers is the data subjects themselves, ie. the members of the group, when they initially join the group. The information on this database is necessarily disclosed to committee members and others such as our administrator in order to facilitate the purposes for which the group exists.

The second purpose for which personal data is held is registered as Customer/Client Administration, ie. to administer, and subsequently bill for, members' use of British Telecommunications PLC Gold Automated Services trading under 'The Force'. Again, the personal data held has been supplied by members themselves when they initially join 'The Force'. Any member of 'The Force' who wishes to know the state of his or her entry in this database can contact the person in charge of Force Accounts. The information on the database is also disclosed for statutory audit and tax purposes.

The third purpose for which personal data is held relates to Public Relations, and concerns the BABBS Bulletin Board run by Tony Game. It consists only of names and personal identifiers submitted by members using the facilities of the Bulletin Board, and

these are disclosed only to other callers to the Board.

At the last AGM, I stated that it was the intention of those nominated, if elected, to co-opt Ivan Knezovich as a full member of the Committee, and Tony Game as Committee Member in charge of the Bulletin Board, with no other duties. This was done at a meeting on the 25th April, 1986. Apart from this, there have been no changes to the Committee until February 2nd, 1987, when Tom Wright notified the Committee of his intention to resign. Tom is not alone in feeling that much time is wasted in Committee Meetings. Difficulties arise through many sources, the main one being that the Committee is composed of volunteers, who, if not allowed to have their say, are at liberty to withdraw their services. Other difficulties arise through the members of the Committee being geographically so far apart, so that when a job needs more than one pair of hands, much travelling is undertaken. Trying to maintain proper channels of information between Committee Members and others who assist them has always been a problem. It is to be hoped that the Organizational Plan accepted by the committee on March 1st will lead to greater efficiency in the coming year.

Two other members of the present committee, Nicholas Hunter and Ewen Wannop have also indicated that they will not stand for re-election. I would like to thank them both on behalf of all the members, for the contribution which they have made to Apple2000. I hope that Ewen will continue to make his expertise available to members by continuing his good work in connection with the Force and BABBS.

Many committee members have help from other people, such as Ann Austin who has dispatched disks, Seth Proctor who has been responsible for the Force Accounts. I would like to thank all our helpers and in particular give special thanks to Sak Wathanasin, who has been of invaluable help to me with the Macintosh software library. We could not function without the willing help of such people as those I have mentioned.

Attendance at committee meetings has again been excellent, and I would like to thank the members of the outgoing committee for all their hard work during the year.

5. Treasurer's Report

The accounts speak for themselves and show that the downward trend has been curtailed and that things are looking up.

Your committee and other voluntary helpers have worked very hard indeed to achieve this, by justifying expenditure in advance and by taking on a heavier personal workload.

The better trend can only be taken so far. There comes a time when we all run out of time and are forced to offload some of the work we have undertaken. We do rely heavily on voluntary help and it is for all members to decide how they can contribute to the running of the group, by helping with shows, packing or distribution, helping with the hotline or writing for the magazine, to give a few examples. Keith Chamberlain has recently taken a poll of members to see who is willing to help and these leads will be followed up in due course.

Our relationship with manufacturers, dealers and distributors has improved and is very encouraging. We are being assisted by several software houses who are willing to provide products for use in the running of the group or the production of the magazine. One notable exception has been Aldus, which is very disappointing as we have given them so much good publicity by using their program to produce the magazine.

The support of members and others is perhaps underrated and if we were forced to pay for such services the accounts would look very different. The main source of income is still subscriptions which are all now renewable on the 1st January. We are trying to increase the range of products which we sell to members and to find cheaper sources of good quality products so that we can offer better prices to the membership. Much of the income of the Force is immediately paid out again, but we retain the admin. fee in order to cover our costs. There has been a real cut in consultancy fees, due mainly to more work being undertaken on a voluntary basis. Audit fees have reduced, but are still high and we will endeavour to reduce them still further.

Last year we decided to concentrate some expenditure on attracting new members, in updating the magazine, and on showing a higher profile at national shows, and to a certain extent upon advertising. Future plans include improvements in services, the most visible being the magazine, offering of more reasonable, varied supplies if better suppliers can be found. I would like to thank the committee for their support, also Seth and Sheila for their help with the book-keeping.

Joe Cade asked for an explanation of the consultancy fees and was told by the Treasurer that they were payment to Sheila Hirst for administrative help.

6. Adoption of the Accounts

After a brief discussion, Seth Proctor proposed the adoption of the accounts with thanks to the Treasurer. This was seconded by Tom Wright and passed unanimously.

"At this point the outgoing committee resigned."

7. Election of Officers and other members of the Committee.

Norah Arnold was asked to read out the necessary information, which was as follows:-

Two members of the outgoing committee, Ewen Wannop and Nick Hunter, were not standing for re-election. Thanks were due to both for the work they had put in over past months.

Nominations received were:-
Chairman - Jim Panks.
Secretary - Norah Arnold.
Treasurer - Irene Flaxman.
Committee - Keith Chamberlain, Graham Attwood, Ivan Knezovich, Seth Proctor.

Joe Cade proposed that all the committee nominations be accepted and Micheal Irons seconded this proposal which was passed unanimously.

Norah Arnold stated that it was the intention of the new committee to co-opt Tony Game to be committee member in charge of the bulletin board, with no other duties as had been done last year. Jim Panks said that he was pleased to announce that Tom Wright had agreed to return to the committee and would be co-opted at the first opportunity.

8. Appointment of Auditors

The Treasurer stated that it was necessary to formally reappoint Buzzacott and Co. of Harpenden as the company auditors. Joe Cade asked whether the high fees of Buzzacott and Co. were justified.

The Treasurer said that Buzzacott's charges had reduced over the year, and that they now knew our business, and we knew them. Accountants charges are high and enquiries had been made elsewhere and the treasurer recommended no change. More work had been done in-house therefore charges had reduced. The auditors were required to give a breakdown of costs and are aware that we look around for alternatives.

The Treasurer recommended retaining Buzzacott and Co.

Graham Attwood proposed and Seth Proctor seconded that the auditors be reappointed. This was passed unanimously.

9. Any Other Business

a. Joe Cade asked for more information on courses. Jim Panks answered that the intention had been to reintroduce courses but there had been snags. Professionals had been willing to make their courses available at low charge but very few members wanted to take up this opportunity. There followed a short discussion on the subject matter of courses and members interests.

b. The question of choice of venue for the A.G.M. was discussed with reference to the poor attendance of members. The Chairman expressed his view that many members do not wish to get involved. Ivan Knezovich thought that if something was to go wrong and the members were unhappy then they would attend.

c. Ewen Wannop questioned the Chairman's remark concerning a new small bi-monthly news update. Jim Panks thought that it would encourage more interest and help sales, while being supported by advertising. Ewen Wannop asked why not have a monthly magazine. Jim Panks said that although he agreed that a monthly magazine might be the ideal answer, it was not possible without employing a full-time team to produce it. The small update would consist only of latest news plus an order form. Joe Cade thought that it would be good to have the update as regards workshops, because it would cut down the lead time and give people a reminder at the right time. Ivan Knezovich saw it as an improvement in services. Jim Panks thought that it would improve communications with members.

There being no further business the meeting closed at 2.48 pm.

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MacChat

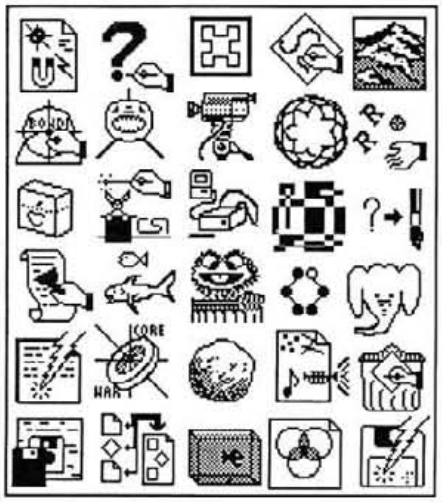
Norah Arnold takes a look at topics of interest to Macintosh owners.

System Update

System version 4.1, Finder version 5.5, and LaserWriter driver version 4.0 have appeared on the scene supported by the newest releases of the Apple Utilities. According to Apple the new system is primarily intended for use on the Macintosh Plus, Macintosh SE, and Macintosh II. The new software will function on both Macintosh 512K and 512Ke with a few reservations. Firstly, the amount of memory that the system uses has grown, and in the 512K machine, some applications may have problems dealing with the reduced memory available. Secondly, because the System Tools are provided on 800K disks, the new files need to be transferred to 400K disks before they can be used on a Macintosh 512K. The new system is not intended for use with the Macintosh XL.
The new LaserWriter drivers, LaserWriter & LaserPrep, have been enhanced to speed up printing and provide several new features. All LaserWriter users on a network must upgrade to the new drivers to ensure efficient working of the printer. The new LaserWriter driver can be used by System 3.2 by dragging the LaserWriter and LaserPrep from the new disk to a 3.2 system folder. There is also a new addition, "Easy Access", which makes the Macintosh easier to use for people who are physically disabled. The new software also includes Sound and Monitors control panel extensions for the Macintosh II.

Apple have recommended that all users of hard disks larger than 32MB should upgrade to System 4.1 to take advantage of a bug fix.

The following system tools are included:-



Finder
The Macintosh's basic desktop file manager. Besides improving basic efficiency, version 5.5 supports the Macintosh II, provides improved support for AppleShare, and has the added menu commands Shut Down and Restart.

Font/DA Mover
A utility for moving fonts and desk accessories between disks. This version (3.5) improves efficiency while retaining the same features as previous versions.

Fonts
A font file containing the following ImageWriter and LaserWriter fonts: Athens 18; Cairo 18; Courier 9,14,18,24; Helvetica 9,14,18,24; London 18; Los Angeles 12, 24; Mobile 18; San Francisco 18; Symbol 9,10,12,14,18,24; Times 9,14,18,24.

Find File
A desk accessory for locating files in folders. Version 1.1 has enhanced support for file servers and a new feature that brings a found file to the desktop.

Chooser
The desk accessory for choosing peripheral devices. Version 3.1 incorporates compatibility enhancements for the Macintosh II. Like version 3.0 shipped with the Macintosh SE, version 3.1 has a new modular design and supports printers, file servers, and zones.

Control Panel
The desk accessory for setting up the Macintosh environment to suit the user. Version 3.1 includes support for the Macintosh II. The Control Panel's new modular design includes the new features Sound and Keyboard, in addition to General, Monitors, Mouse, and Startup introduced in version 3.0.

Apple HD SC Setup
A utility that initializes and tests Apple's SCSI family of hard disks. The new version 1.3 incorporates general improvements to the software's efficiency and specific improvements to its functioning with larger capacity hard disks, such as Apple hard Disk 40 SC.

Disk First Aid
A utility for making repairs on a damaged disk without losing data or applications. Version 1.2 is enhanced to recover data on more types of damaged disks.

HD Backup
A utility for backing up data on Apple's family of hard disks to 3.5-inch disks. This version (1.0) is the same one that shipped with the Macintosh SE.

Teach Text
An application for reading update notices (often called READ ME) that Apple ships with its system or application disks. In addition, Teach Text is a mini-editor used in the System Tools User's Guide to teach new users basic Macintosh operations. This version has no changes.

Easy Access
Two utilities for the people who have difficulty using the mouse or executing multiple keystroke commands. Mouse Keys substitutes key strokes for mouse movements; Sticky Keys invokes all keyboard commands with a single key.

Omnicrom

Although rather expensive, Omnicrom was another most impressive system seen at Rotterdam. Using the Omnicrom system, it is possible to add up to 60 colours, including matt, metallics and gloss, to laserprinted output.
You need to insert a laserprinted sheet (or a plain paper photocopy)

between an Omnicolor sheet and its backing paper and feed it into the Omnicrom 2000 machine. The black areas are then transformed into colour, or colours, if you added Omnicolor patches over selected areas.

The machine also acts as a normal laminating machine, and a thermal binding system for up to thirty pages, which I suppose is not many.

The Omnicrom DTP Kit has been assembled to provide users of DeskTop Publishing Systems with a comprehensive starter kit. It contains the following:-

1 Omnicrom 2000 machine
8 packs (100 sheets each) of the following Omnicolor foils:- gold, silver, dark red, dark green, medium yellow, medium grey, medium brown.
1 pack (100 sheets) Omnigard laminating film.
1 pack Omniclear masking and glazing film.
1 Accessories set, comprising low-tack tape, cutting mat, scalpel with replacement blades, and Users Guide.

More information can be obtained from Omnicrom Systems Ltd, Tonge Bridge Way, Bolton BL2 6BD. Tel (0204) 392050.

LaserPaint

One of the highlights of my visit to the MacWorld Expo in Rotterdam was my introduction to LaserPaint®, which is a complete graphics and text environment for creating professional camera ready artwork for the graphic artist, art director, designer or desktop publisher. Instead of using a series of programs such as MacWrite, MacPaint, MacDraw, Superpaint etc. and then transfering their output into a page design program such as PageMaker or Ready, Set, Go!, LaserPaint integrates into one package Drawing, Painting, Text and Paste-up with all the accuracy and precision that you require.

The Drawing module creates full PostScript pictures, using many PostScript features not accessed by other programs.

- Full Resolution line drawing, depending on the output device, up to 2540 dots per inch (dpi).
- Filling of shapes with patterns or screens.
- Circles, squares,lines, arcs, curves and spirals.
- Special types of masking of shapes.
- Custom dashed lines, line joining and line capping.
- LineWidth from a hairline to a fatline (1 to 99 pixels).

The Painting module allows more stylized painting to be done and shading or emphasis can be added to drawing. You can do everything in this module that you could do in MacPaint, and more, but at the full resolution of the printer you use.

- Full resolution bitmaps, up to 600 dpi.
- You have a Pen, a Brush and a Marker with six tip shapes which you can customize.
- FatBits is available.
- Cropping and Scaling.
- Airbrushing.
- Automatic Airbrushing for creating custom screens and artwork.

With the Writing module, text can be added to the artwork with professional typesetting results. You can type the text or edit it, or load it from another source.

- Full adjustment of leading, negative or positive.
- Full adjustment of Kerning.
- Multistyle, Multisize and Multifont.
- Runaround text justifying inside or around any picture.
- Text placed on any defined path.
- Exceptional justifying results.
- Standard and custom layout (35 picas, 39 picas, 41 picas).

Now comes the point that impressed me most of all. LaserPaint will create full colour separations of your artwork. You can work in black and white, line colours or even full colour. Overlays are produced with instructions to the printer if necessary.

A demonstration disk of Laserpaint® has been placed in our Macintosh library. It is well worth taking a look, if you are likely to be interested in the full working version, which will be available shortly.

DeskTop Art™

As publishers of what is claimed to be the world's most widely used graphics for visual communicators, Dynamic Graphics understand fully the importance of images. It is this understanding that prompted Dynamic Graphics to introduce DeskTop Art™, a product line of collections of graphics for the Macintosh and for the IBM PC and compatibles. In its operation, Dynamic Graphics commisions thousands of graphics, illustrations and photographs from leading illustrators and photographers. The art is copyrighted and published in Clipper Creative Art Service® and Print Media Service®, monthly camera-ready art services. Subscribers in more than 85 nations use the art to produce their own visual communications and graphic design projects.

Using an always-growing library of more than 20,000 exclusive illustrations, Dynamic Graphics personnel select images that particularly meet the needs of the desktop publisher. These images are then digitized and meticulously refined to match the full capabilities of such machines as the Macintosh. DeskTop Art images can be used as-is or creatively altered to meet individual designers' needs. The artwork is compatible with the common visual communication programs including graphics, drawing and page makeup programs.

Seven DeskTop Art collections are currently available for the Macintosh. The titles are:- Graphics and Symbols 1, Borders and Mortices 1, Business 1, Sports 1, Education 1, Four Seasons 1, and Artfolio 1. Each Macintosh collection contains two disks of 200-300 graphic images stored as MacPaint, MacDraw and/or FullPaint files. Each collections requires one or more of these programs to view, manipulate or retrieve the artwork. Although the collections could be used with a Macintosh 128K system, a Macintosh 512K, XL, or Macintosh Plus is recommended, as is an external disk drive.

In addition to the disks of software, each collection includes an instructional How-To Guide, a Pictorial Index and a heavy-duty storage case.

Dynamic Graphics commitment to desktop designers is a logical extension of the company's other products and services for visual communicators. John L. Rush, the firm's president, says, "Our people feel a personal commitment to the designer or production artist sitting at the drawing board. Desktop publishing has now developed to the point that we can deliver the quality of images that those professionals expect from us."

More information can be obtained from
Dynamic Graphics (UK) Ltd,
Media House,
Eastways Industrial Park, Witham,
Essex CM8 3YJ.
Tel (0376) 516006.

ROTTERDAM MACWORLD

The first MacWorld Expo to be held in Europe took place at the Ahoy Centre in Rotterdam on 22nd - 24th April 1987.

Why Rotterdam? As Europe's largest port, it is an important centre of industry and commerce. It is already recognised as a gateway to Europe, but Dr J M Lindhorst (Acting Mayor of Rotterdam) dubbed it the Interface to Europe for the three days of the Expo.

Rotterdam greeted us with glorious sunshine, and the usual friendliness of the Dutch people - all of whom seem to speak impeccable English, so that there are no language problems.

The Expo was officially opened by Dr Lindhorst, and we heard the MacWorld Theme for the first time. This was composed and performed using a Macintosh, but we reckoned that our own Greengate could have done better! The final duty of Dr Lindhorst was to make a presentation on behalf of Apple Computer B.V. - a Macintosh SE for the Rotterdam "Stichting Handicap, Scholing en Arbeid", so it is not only the UK industry which is recognising the needs of the handicapped and offering encouragement in the form of donated hardware.

MacWorld Rotterdam was chosen to launch 25 new products into Europe. These included Adobe's Illustrator, Quark's Xpres, Aldus' PageMaker v2.0, Letraset's Ready Set Go 3, D.O.S.'s LaserPaint, and MacMemory's TurboMax.

The long-awaited Agfa 400dpi printer was there, along with the complementary flat-bed scanner, which can scan at 400dpi. Very impressive - it's surprising what a difference the increased resolution makes to the final image.

Apple themselves launched no new products, having made their announcements at the beginning of March. They are keeping to their promised resolve of simultaneous product launches throughout the World - it's good to see this, after the years of frustration when products were launched much earlier in the States than they were elsewhere.

Apple still rely heavily on third party manufacturers to provide not only software products but also peripheral hardware to fill the gaps in their own product ranges, such as scanners, large screens, higher-resolution printers. It is recognised that these strengthen the Macintosh's position in the business market, but Apple appeared to have no immediate plans to diversify into these areas (at least, no-one was giving away any secrets!). We were quite surprised on our return, when we heard that Apple Computer Inc. are to set up a new company to write and/or distribute new software for both their product lines. Apparently, the new company will ensure that software products which may not be commercially viable can still be made available, thereby strengthening the position of the machines in the personal and business computer markets.

Apple's presence at Rotterdam took the form of a large stand with representatives from all the European offices, including Apple Computers (UK) Ltd. During the three days, we met many 'old friends' from Hemel Hempstead, most of whom were just present for a single day.

Desktop Publishing is still seen as a strong sector of the market, but the emphasis this year will be on Desktop Productivity, with management being more innovative, effective and productive in their use of personal computers.

It was pleasing to see several American manufacturers in evidence at the Expo, in search of distributors in the UK and in Europe. So, we can hope to see a more efficient import of products from the States. When we were asked for an opinion of the various UK distributors, it brought home to us just how difficult it must be for overseas companies to judge the UK and European markets, and how reliant they are on their local distributors - it really is important that they make the right choice, so the presentation of products to potential users may have been of secondary importance. They still had plenty of time to speak to visitors and to demonstrate their products, though.

Blyth Software Ltd had a large stand, with representatives from various European countries, emphasizing the range of their activities. Niroo Rad was there with some of his colleagues from the UK, to support the developers who were presenting their Omnis applications.

In addition to new product launches, there was an almost continuous program of seminars and conferences covering a wide range of topics. The distinguished speakers included Andrew Seybold on Desktop Publishing, and other topics included the use of Macs in the MS-DOS and mainframe environments.

The Expo was very well organised, as you would expect of the Dutch, and all within a three-month organisation period! It was rated a success by everyone we spoke to - be they visitors, exhibitors, or organisers. The organisers needed 5000 visitors for the event to break-even, so they were delighted by

the count of 7000 visitors over the three days. It looks as though this will become an annual event, which augurs well for all enthusiastic European Mac users. It's disappointing, though, that there is no intention to change the venue each year - so it doesn't look as though we'll be hosting MacWorld in the UK. We can look forward to the MacUser Show in November, though.

Larry Tesler flew over for the Expo, following on with a visit to the factory at

Cork

Amongst the guest speakers at the MacWorld opening ceremony was Mr Larry Tesler (Vice President Advanced Technology of Apple Computer Inc.). His Advanced Technology Group explore techniques for use in future developments, and it was they who recommended the adoption of the Nubus interface. He pointed out that they constantly monitor developments in Europe, and requirements of the European market, for incorporation into their development program.

He presented Apple's philosophy for the future, although he was giving no indication of new products on the way. His presentation included some interesting statistics which showed that the Macintosh is increasing the productivity of users within all aspects of industry.

During 1986/87, sales of Macintoshes doubled, so that there are now more than a million in use throughout the World. Third-party developers are strong, so that over 2500 software packages are now available for the Macintosh - many have been developed in answer to specific needs, but developers are encouraged to publish their software in the widest possible market. Why has there been such a dramatic growth? because of the ease-of-use, the graphics architecture, the cut-and-paste features, and the Appletalk simplicity that we all take so much for granted, but that mean a significant reduction in the learning curve (which is recognised as being so important, now). Who is using the Macintosh? about 60% of users (world-wide) are business users, with Europe having more business users than the rest of the world. Of these, over 50% are in services and over 25% are in manufacturing.

Various studies have been undertaken to gauge what benefits are attributable to the use of the Macintosh. In manufacturing, a research group reported productivity up by 50%; in a chemical firm, professional users reported increases in the quality of their products and in the competitiveness of their company; in an aerospace company, the engineering department found an error reduction of 75% in production and a reduction in the costs of reporting; in a marketing company, creativity was increased by 25% (although I've no idea how one measures creativity!).

When compared against MS-DOS, Mac productivity was found to be 45% higher, and usage of the Mac was 5 times higher, more applications being used by each person (due to the consistency of operation). Over a 5-year life span, the costs of using the Mac were estimated to be about 28% less than those of using an IBM PC, due to the savings in training, etc. - quite apart from the competitiveness of the Mac pricetag.

Many new users bought the Mac for the Desktop Publishing applications, but then moved on to further applications. With the new emphasis on compatibility with other machines and operating systems, the goal is to provide transparent access to all data - which, it is hoped, will encourage more corporate users (who may already have heavy investments in other systems) to develop an interest in the Mac. Desktop communications is to be a key phrase this year, with the emphasis on person-centred communications. We can expect to see expansion of the communications features by direct connection to fax machines, scanners, Optical Character Readers, local area networks, etc.

At a question-and-answer session, we asked Mr Tesler some awkward questions. He was giving no information about new products, so some of the questions were neatly dodged.

There are apparently no plans for a cheaper version of the LaserWriter, although we have heard rumours about one.

He was surprised about comments that there had been problems in Europe with the 800k disk drives on the MacPlus, when it was first released. This prompted questions as to the reliability of the Mac II and SE, and whether there should be an extension of warranty periods when new products are launched. Although there were teething problems with the Macintosh II, there is no intention to extend the warranty period beyond the normal twelve months - Larry did admit that initially the failure rate was unacceptably high, but claimed that the problems had been corrected so that it is now acceptable (well over 90% success rate). This is based on the performance of some 2000 machines out on test. Not all software will run on the Macintosh II, although most of the popular packages will work (i.e. 29 out of 30) - as an example, Liz Bond (of Adobe Systems) pointed out that their Illustrator worked perfectly on the Mac II the very first time they booted it!

The CD Rom developments are going slowly, due to the many differences between players. Apple are involved in the development of a standard interface, so that there should eventually be compatibility between the various machines. CD 'worms' were in evidence at the show - i.e. write once, read many times. Again, these are being developed for the Mac, but are not yet available, and the price looks like being very high.

How about a portable Mac? Apple are looking at the various options, but are not giving anything away at present - there are a number of options open to development, but there has to be a trade-off as the portability has to reduce the capabilities.

Apple are looking for quicter fans for both the SE and the Mac II. This prompted a question about upgrades for existing users. Unfortunately, there is no intention to provide upgrades for changes such as this. As with all purchase decisions, you take a chance when you buy - if there is a new improved version just over the horizon then it's too bad, you're stuck with what you purchased.

Think

1988

OMNIS PAGES

The Product Support Team at Blyth answer some more questions on the Omnis range of products.

Many thanks to Omnis users who supply us with a constant flow of interesting questions and from time to time the answers as well ! We are pleased to welcome Karen Richardson and Richard Langan to the Product Support Staff at Blyth, both of whom are now available to provide telephone support.
Right, now for this issues problem solver with some clues on printing reports, calculations and importing files.

Yearly Reports on a //e

S.W.Makin,
Canterbury,
Kent.

We use Omnis 3 on an Apple //e for all of our business documentation. Once a year I need to print a report about my 37 employees which sub-totals at the bottom of the page, after 17 records, before the records continue on to the second and last page . I have only been able to get the subtotal printed out at the top of the second page when the report gets to the end of the default number of lines per page. Have you any suggestions ?

ANSWER

Try creating an normal, invisible field, and give each employee's record a value for this field. For records 1 - 17, give the value A, and for records 17-37, give the value B. Sort on this field, checking the sub-total and page break boxes, and your subtotals will appear at the bottom of the page after 17 records.

Calculations explained

David Storey,
Solihull,
Warwickshire.

We are a local government authority and award grants for building projects based on the amount spent on building work by the applicant. These are never awarded below a statutory expenditure amount on the building work of £69, and can also vary according to the applicant's status. For example, in some cases, the grant remains fixed at £69 , sometimes it matches the amount spent regardless of the size of the sum, and at other times the grant is subject to a percentage increase on the base rate. What do you recommend as a suitable way of dealing with these calculations ?

ANSWER

Create a normal field to contain the sum of the amount spent,say F1. Then create a number of normal calculated fields, say F2 onwards, set to two decimal places, to match the different kinds of calculation you wish to perform. Using normal fields rather than temporary will enable the resulting data to be stored.
For the simplest grant award where the amount spent has to be £69 or more and the grant remains at a static £69 regardless of amount spent, use the calculation :-

```
(F2>68)*69
```

If the amount spent is £69 or more and is always matched by the grant, use the calculation :-

```
(F2>68)*F2
```

It is possible to render the (F2>68) part of the calculation as a temporary field, say #1, then include this qualifying calculation as #1 in further calculations within the normal fields.
If the amount spent is matched by the grant and then increased by a percentage, say 9%, use the calculation :-

```
((F2>68)*F2)*1.09
```

In this way additional percentages, for example, a percentage of the percentage over £69, can be worked out based on the above calculations.

Printing Boldface on the LaserWriter

G.Harries,
Ramsgate,
Kent.

I would like to find a way of controlling Bold typefaces from within Omnis 3+ layouts. I am on a Mac+, printing out to the LaserWriter. Is it possible to preserve the Bold type when I export text into Pagemaker ?

ANSWER

Place control characters at each end of the text you want to embolden. To start Bold type, use 27,33 and to end, use 27,34. Unfortunately, the Bold text is not preserved when exporting to Pagemaker and will have to be restored from within that program.

Printing more than one copy

R.A.Munnings,
North Shields,
Tyne and Wear.

I want to be able to print two copies of one particular report. On the Job Set-up screen, I change the number of copies required to 2, but when I go on to print out, it only prints one copy.

ANSWER

You are probably clicking on Job Set-up in the Parameters section for this report. When you do this, the number of copies designated in the Job Set-up section will return to the default number of 1. Make sure that the Job Set-up box is not checked. It might be advisable, if you sometimes want 2 and sometimes 3

copies of the same report, to create two separate identical layouts with individual number of copies settings.

Lisa & Omnis Printing Problems

G.Wilkinson,
Chesterfield,
Derbyshire.

I have been using Omnis 3+ on the Lisa and have some trouble printing out reports on my Appletalk Imagewriter. The problems don't occur when I print to the LaserWriter. I print one report, which can be any report, and the system crashes at the end of printing with the message "Unexpected Program Error 14". What can I do about this?

ANSWER

The Incompatability is between the Lisa and the Appletalk ImageWriter, but it is easily overcome by always printing with fonts. The Monaco 12 font will give the same typeface as that generated by printing without fonts.

Inserting Data from 'Import File'

K.Beckwith,
Rathbone Place,
London, W.1.

We are using Omnis 3 on a Mac. We encountered a problem with the 'Insert Data from Import File' option. It works well but the importation stops itself exactly at the end of the first block of the text file. We have tried with one field per line and one record per line formats. What do you suggest ?

ANSWER

Conditions are slightly different if the text file is not provided by the Omnis Export utility. The text file to be imported should have at least one block of data after the end of file marker.

Send in your Omnis queries and remember our Omnis Corner at the June 27th Workshop.

Printing Addresses.

Mrs B.Berridge,
Hayes,
Middlesex.

We print out letters which can have varying address lengths and occasionally just a name and no address. When the name and address is less than the standard four lines we have allowed, the rest of the text in the detail section moves up by the equivalent number of lines. We are anxious to find a way round this.

ANSWER

Make your address fields normal fields, e.g. ADD1, ADD2 etc and give them the attribute *No line if empty*. Underneath the bank of fields designated for your customer's address, create the same number of temporary calculated fields, say #1. Make these *No line if empty* and *Invisible*. Give them the calculation :-

ADD1=", ADD2=" etc.

So for every address field there will be an equivalent temporary field.

Normal Field	Associated Calculated Field	
ADD1	#1 *calculated as*	ADD1="
ADD2	#1 *calculated as*	ADD2="
ADD3	#1 *calculated as*	ADD3="

This in effect says "If Address 1/2/3 is empty, then this calculated field line goes in". The two types of field must be banked up together, all the normal fields then all the calculated, to ensure that all the address lines both blank and empty, appear as one block.

Labels, Labels!

John Barber,
London,
N.W.6.

How can I achieve a wordwrap effect on my labels ? They contain a product description which can run to more than the standard line length, and it would be easier and quicker for my operators if they could type continuously rather than entering and tabbing on each field line. I have a second problem with my staff not entering information on customer records and would like to be able to ensure an entry on particular fields. If they do not have adequate information to enter in a particular field, it tends to get left empty rather than an effort made to acquire the missing details.

ANSWER

The answer to your first problem is to give the fields on the label the attribute *linked*. This will generate the wordwrap effect you need, linking one line of text to the next without having to tab on to the next field. This attribute need not be set for the last field in your block of text.
For your second problem, put a check calculation on the fields in which an entry must be made.

:LEN(*field name*)>0

ensures an error message indicating that the check requirements have not been filled. In this case the length of the character string must be more then 0, calling for an entry of some kind.
Just in case you consider using this on your labels, note that a check calculation of this kind will only work on the first field of a set of linked fields. Once the tab button is pressed from within a set of linked fields, the cursor will move out of the set regardless of any subsequent checks.

User friendly BLYTH win User's recommendation.

Blyth Software have actively supported the group for over two years now, they have been generous in supplying software that now run the groups - Membership List - Force Accounts - Apple IIGS selector. As well as this they have actively supported the Omnis pages - sending us answers to user's problems.
We have found the excellent technical support a bonus over other software and welcome Blyth as an Apple2000 'Recommended Dealer'.

Mac Library

by Norah Arnold

Sixteen disks are added to the Macintosh Library

Disk 144
MacUnderground and IdeaLiner

Courier


µFilm Reader 0.9R3


MacWeek 6 • Jan 9'87


MacWEEK 12/26

MacUnderground is a disk based magazine. Courier is a communications program and µFilm Reader is a novel reader for perusing the magazine. See picture at base of the page.

IdeaLiner

IdeaLiner is a shareware program for the Macintosh. The principle purpose of IDEALINER is the construction of structured outlines. It follows the Macintosh User Interface guidelines for the most part.

A Tutorial Introduction


Idealiner User's Guide


Idealiner 1.8

IdeaLiner should prove useful to anyone doing library research, or assembling the fruits of such research into a document, such as a term paper or a legal brief.

One note of caution — this is a shareware product, and has not been exposed to the months of detailed testing that a regular commercial application receives. The author has fixed all the bugs he knows of, but... Save often!

Disk 145
MyBackUp, Cabri, Scholar's Aid and ResDecomp

My Back Up is by Rick Giles and is distributed as shareware. With the My Back Up application, a user can simply and routinely back up files from one volume (disk) or folder to another volume or folder.

Cabri


ResDecomp

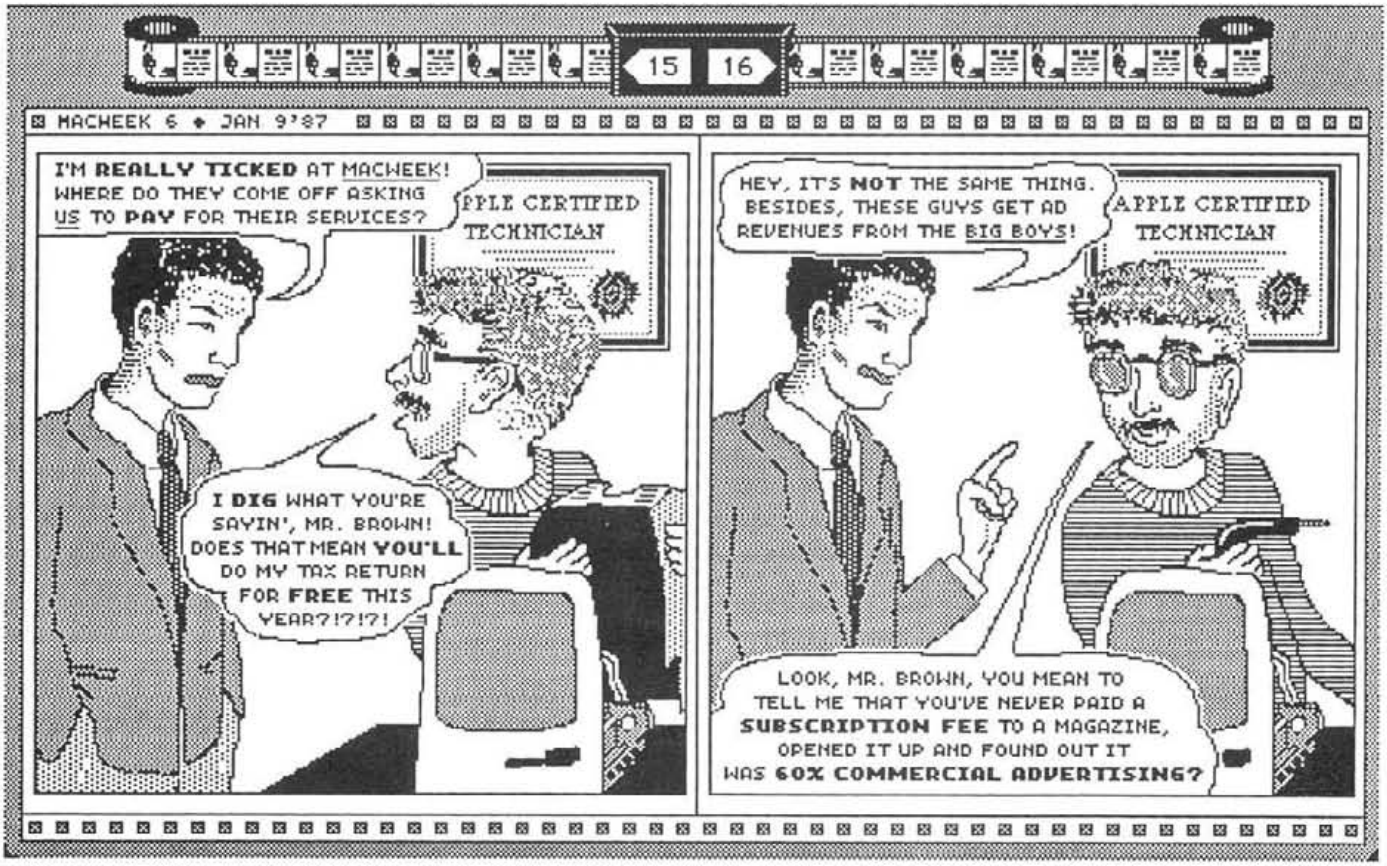

My Back Up.doc


My Back Up


Scholar's Aid 9.71

The operation of My Back Up is controlled by your selection of source, destination and options from the primary dialog and your issuing of commands from the menu. You may also use desk accessories from the Apple menu while you are working with My Back Up.

If you select the Incremental Back Up option, then, under the HFS,



if a source file was modified since its last back up, then it will be copied to the destination; otherwise, it will not. If the source volume/folder is under the MFS, then My Back Up will compare the date of a source file with the date of a file of the same name in the destination. If you do not select the Incremental Back Up option, then all source files are copied to the destination.

Other options are available such as Duplicate Subdirectories , Verify Replacement Ignore Subdirectories, Ignore Invisible Files and Ignore System Files.

Cabri

Cabri is a tool for research and teaching in graph theory which allows you to handle graphs as you would do on paper. The main interest in Cabri lies in its highly interactive character. The objects manipulated by Cabri are sets of points together with edges interconnecting them.

Cabri consists essentially of a graph editor, associated with a toolkit allowing different computations, such as the evaluation of graph invariants or the performing of some classical transformation. There is also a random generator of graphs developed to allow the user to experiment with theorems.

Scholar's Aid

This is what the author says about Scholar's Aid:-

Have you ever written a long paper and then found one more reference that really should be included in the first paragraph? Thirty references to renumber! Haven't you ever wished that your computer could renumber those references? Scholar's Aid lets your Mac do that and more.

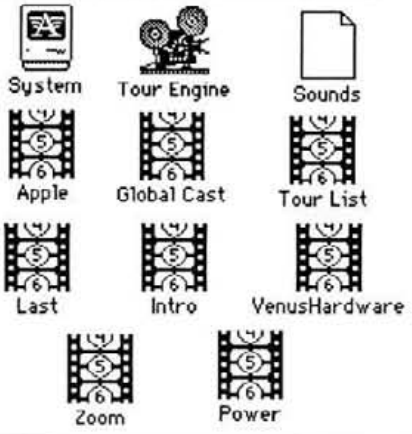
Scholar's Aid searches your text for figure, table, equation, and reference citations and sets up files to be printed using Microsoft Word. The finished document has figures, tables, equations, and references numbered consistently in the text and includes a reference list in the format you specify. The reference list can be compiled by a search of a database file of references (a bibliography), using a Microsoft File database.

You will find that Scholar's Aid makes writing documents easier. You no longer have to think about numbering of figures and equations. Your mind can be on the writing.

Need a proposal made up of sections from old papers? Just copy and paste together sections from the papers made with Scholar's Aid and you are ready to renumber and make a new reference list. Once your bibliographic database is big enough, you will find that most of your citations are already available for inclusion in new documents. Need to resubmit a document to a journal with a different reference format? No problem with Scholar's Aid. Scholar's Aid is a shareware program.

Disk 146

Adobe Illustrator Demo (800K)



Disks 147 & 148

Guide™ Demos (both 800K)

Guide ™ by OWL International, Inc. is known as a hypertext processor. It can be thought of as a combination of ThinkTank, FileVision and MacWrite all in one.

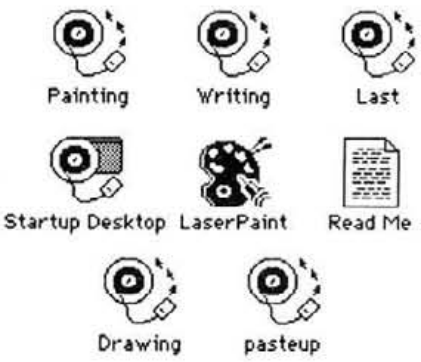
Disk 147 contains a demonstration of Guide's Envelope facility and contains much of the info from the January 1987 issue of MacWorld.

Disk 148 contains an Envelope Demo about Guide™ itself and a Letter from OWL.

Disk 149

LaserPaint® Demo (800K)

This is a full demo version of the graphics workshop program for people working with a LaserWriter.



See the MacChat pages for more info on Laserpaint.

Disk 150

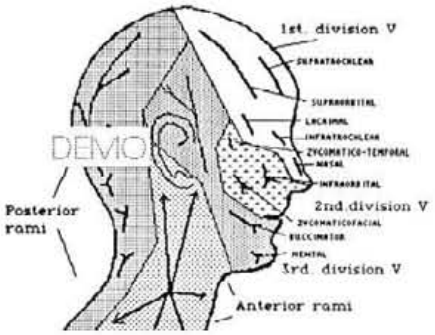
MacGolf Demo Disk

This demo gives the user full access to the first two holes of this popular Macintosh game.

Disk 151

MacAnatomy demo, etc.

This disk contains a demo version of MacAnatomy consisting of MacPaint files. The disk also contains BioRhythm, MidiScope, Maze, FontTester and several DA's.



Disks 152 to 158

MacMovies Demo Disks. (all 800K)

These disks contain various MacMovies demos as listed below. You do not need to own MacMovies in order to run the animations on these disks. See the review of MacMovies in this issue.

MacMovies Demo Disks

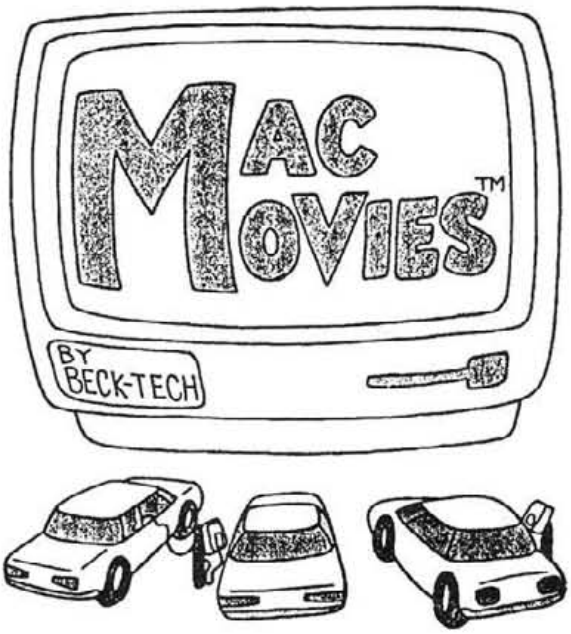
152	The Chalice
	Space
	Macs Headroom
153	'MacWorld'
154	Miami Vice
	Pactel
155	The 'Today' Show
156	Map
	Moonwalker
	Motor
	Pencil Test
157	Letting Mac Out Of The Bag
158	Olivia

Disk 159

PS CookBook

This disk contains PostScript™ files which have been typed in for the convenience of users.

Please note.....
All library disks are 400K except where stated to be otherwise.



by Irene Flaxman

Beck-Tech's MacMovies enables you to create animated sequences from MacPaint format files. Why would you want to create animated sequences? For a number of reasons - as a presentation aid, as a 'running demo' for a new product, for a statistical presentation, or just for fun!

Having created an animation sequence, the program will allow you to vary the speed of replay, run the animation forwards or backwards, freeze frame, or even chain a series of movies into one long sequence.

The minimum system requirements are a 512k Macintosh with system 3.2 or later and finder 5.3 or later, but an second disk drive is recommended. The program will apparently work with 400k drives, but 800k drives or a hard disk are recommended (I used 800k drives). The manual also warns that long movies or those with complex source images may not run on a 512k Mac.

The raw materials of your animation are screens saved in MacPaint format. These can be created using a paint program, a 3-D graphics program, a drawing program, a postscript graphics program, a video digitiser, a scanner, or even screen dumps. The source does not matter, as long as you can save in MacPaint format.

Animation is achieved by creating a series of screens which are all related to the basic theme, but changes are brought in to give the illusion of movement when the screens are displayed in sequence. To achieve this requires some careful planning, to ensure that you get a smooth-running sequence. Changes between screens may be subtle or startling - there are no rules, so use your imagination.

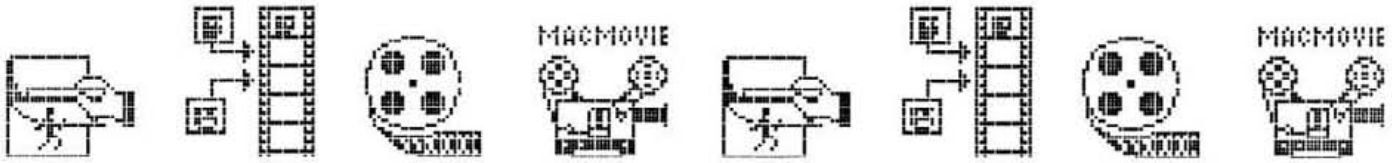
Often, animation will involve repetitions of a sequence of screens to depict a constant, rhythmic, movement - e.g. a running figure. The starting point would be to make multiple copies of each screen in the sequence, with different names - you can then edit around these to complete the effect you require.

You would be well-advised to invest some time in planning prior to starting to make your movie. If you have a subject moving across a complex background, the editing of frames can be quite difficult - and if you find that you have misplaced your main subject along the way, then re-editing can be time-consuming and tedious. 'Practise makes perfect', though, and an experienced MacPainter will enjoy the challenge.

One of the main difficulties is in remembering the changes you are making to each screen. In MacPaint, as you edit Screen1 to create Screen2 you will destroy Screen1 - how, then, can you judge whether the changes will produce the required result? The Preview facility enables you to judge the animation effects (more of this later), but I feel that this is an area where SuperPaint really comes into its own as you can copy Screen1 to the draw layer, then edit the paint layer to produce Screen2 without losing the 'pattern' of Screen1 - perfect!

The file names of the screens will dictate the sequence of the animation, as the program displays them in name order. A useful convention is to name the first screen and append '00' to the name, the next screen having '01' appended, and so on. To change the sequence of display is simple - just adjust the file names.

Having created the screens, you will want to use the first of MacMovies' tools - **Preview.** This will load all the files into RAM and then ask you whether you want to add any more screens to the sequence before running through the animation frames. As it runs through the frames you can see whether you have the sequence right, and whether you are achieving the effect you want. Remember that there must be a smooth



junction between the end and the start of your animation, as you will typically want to run the sequence more than once.

When you are happy with the results, you can use the second tool - **FMComp**. This compresses the information from the individual files, to create a new 'movie' file, which carries all the information necessary to run the animation. The utility saves only the changes between consecutive files, thereby reducing the space requirements. You can set the default speed for displaying the screens, and dictate whether the the playback should 'switchback' (i.e. run through from first to last screen, then run through from last to first, and so on).

This new movie file can be run by either of the remaining two programs included on the MacMovies disk - **Projector** or **MacMovies**. The first of these, Projector, will play back a single movie - the first on the disk. The default speed and switchback settings will normally apply, but you can change the speed of playing by using the numbered keys 1 to 9, use the spacebar or mouse to step through single frames, or use 0 to freeze each frame for sixty seconds. Each frame will be displayed for a set time, depending on the number selected (1 to 9) - the range is 1/30th of a second to 3/10th of a second.

The MacMovies program allows you to play back several movies consecutively - setting the timing, the number of repetitions, and the switchback option for each file. Again, the speed can be adjusted as you run through them.

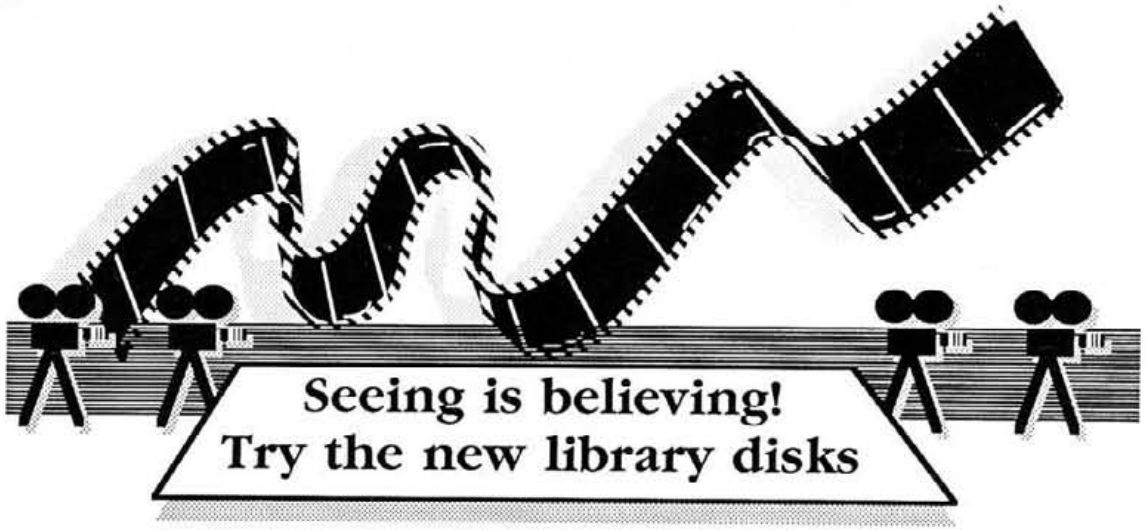
As with all animation programs, the onus is on the user to create the basic pictures which go to make up the movie. If you cannot draw, and have no access to a digitiser or a scanner, then your attempts to create an effective animation sequence could be a particularly frustrating exercise! However, if you persist then your patience will be well rewarded. I feel that one of the main uses for this program is in creating presentation graphics - nobody can fail to be impressed by a moving image displayed at the superb resolution of the Macintosh screen. Another good reason for investing in this program, though, is the sheer fun of creating your own movies!

This animation program is simple and effective, and efficient in space usage. As a guide to the simplicity of use, the manual contains just 26 pages of instructions, includsing technical tips on animation. It takes practise to make the animation sequences smooth and natural, but it is well worth the effort, as the results can be superb.

If you would like a taste of the program, we have several new library disks with sample animations. These sample disks include movies of different types - MacPaint, 3-D graphics, and video.

The cost is $99 plus P+P. We have no details of a UK distributor at this time, but the program can be obtained directly from:

Beck-Tech
Claremont Hotel
41 Tunnel Road
Berkeley
CA 94705
USA



Network News

Current topics of interest centre around the new machines in the Macintosh family.

From Delphi
From: MACINTOUCH
Subject: **Mac SE first Impressions**
I just finished running an extensive set of benchmark tests of hard disks and the Mac SE. I also ran Steve Brecher's DiskTimer II, along with our own "real world" MacInTouch tests. Here are a few of the conclusions:
- DiskTimer II is a valid test of disk performance, accurately predicting the results of "real world" tests such as opening and saving files and duplicating files in the Finder. The only caveat with DiskTimer is that the results should not be interpreted too literally. It's annoying to see ads in the magazines claiming a disk is "n times faster" than competitors because the DiskTimer II number is n times lower. Of course, this is what Steve has disclaimed all along, and I doubt he's had much to do with the marketing hype.
- The Mac SE is definitely faster than the Mac Plus. The SE falls between a Mac Plus and a HyperDrive 2000 in performance, and it is approximately the same amount faster than a Plus that a Plus is faster than an old 512K.
- Read and Write times are surprisingly fast on the Mac SE's internal 20MB hard disk. Duplicating a file in the Finder takes very little time, although opening and closing applications doesn't happen any faster than with other 20MB disks.
- Testing showed no performance differences between System 3.2 and System 4.0.
Ric Ford "MacInTouch" newsletter
From: MACINTOUCH
Subject: **Mac SE keyboard**
The Mac SE keyboard sends a real CTRL code when you use the Control key - I typed Control-H, for instance, and it worked as a backspace. The Control key is not the same as the Command key. I no longer have the SE to play with; does anyone know how the Control key works in Telecommunications programs? Does it let you bypass the Microsoft problems of not letting MockTerminal get the Command-Z combo you're trying to send a CTRL-Z with?
Ric
From: MCOHEN
Subject: RE: **MAC SE 120 TO 230 VOLTS**
According to an Apple representative who demonstrated the SE at the Mac Valley User's Group meeting a few days ago, the SE's power supply will automatically recognize and adjust itself to most voltages and 50 OR 60Hz. - Mike
From: FMBBS
Subject: **Transfer help-SE stuff**
I have a friend that just bought a MAC and wants to be able to read some APPLE IIE disk on his MAC. He has the 3/1/2 " drives for the IIE and has Dollars and Sense and PF file files on that format. Is there any utility to allow the MAC to read those disk?? PS: have a new MAC SE and many pieces of software do not run properly and get a lot of bombs on others. One problem is the inability to save very large clip boards. Try a 100K save and BOMB. I am looking for fellow suffers.
Bill Taylor Fort Mill ME
BBS(MouseExchange runs great on the SE!) 803- 548-0900

From Infomac
From: <bouldin@ceee-sed.arpa>
Subject: **256K Roms for the Mac+**
In all the announcements recently, there was one outstanding omission. No announcement of 256K Roms for the Mac+. Unlike the 512E, the Mac+ can address 256K of Rom. Does anyone have any notions about Apple's plans (or lack of) for a further Rom upgrade for the Plus?? It's bad enough that there is no upgrade path to the SE from the Plus. I sure hope that we at least get a Rom upgrade.
From: rs4u#@andrew.cmu.edu (Richard Siegel)
Subject: **RE: Mac SE comments**
I haven't seen either an SE or a II, but I have seen the dealer info and the new system software. The new stuff (a developers'-only release, not to be distributed or licensed) is pretty nice. There's a new shutdown manager, so (as Tom Dowdy says) you don't have to beat the hard drive to turn off the power; the machine tells you when it's safe to turn off. (This should be especially nice when Unix rolls around, too). I bumped head-on into the new mouse scaling; mine somehow came out to ultra-fast. I would suspect that the new scaling speeds are more for larger screens than for power users. On my 512K Mac I had an EXTREMELY difficult time selecting text and doing other tricky stuff with the scaling set to high speed, but I suspect that to zip across a Radius you'd need it. According to the dealer info, there is NO UPGRADE PATH from existing machines to MacSE or Mac II. This is because of the radical physical difference between existing Macs and the new models. Rich
From: jww@sdcsvax.ucsd.edu (Joel West)
Subject: Re: **SE First Impression**
The SE has no alternate screen buffer? I guess that answers the question we were trying to get an answer out of Apple on. It also indicates why at least the Plus will stick around for a while on -- it's the last machine that will run many arcade games. The 15-20% speedup is because the 68000 is having less (no?) cycles stolen for doing the video refresh. The actual hardware used for the SE is unknown to me, but I heard a rumour that Apple (gasp!) actually added a special chip for video display, rather than doing it all in software, as they did since the Apple I. Joel West
From: gunther.pa@Xerox.COM
Subject: re: **SE First Impression**
Thanks for taking the trouble to document your impressions. Having only read press releases, I'm unable to learn whether or not the 'single expansion slot' in the SE is a NuBus slot, an IBM-AT slot or yet another slot. Even if "nothing is sitting in it", can you (or anybody else reading this msg) identify it? Neil.
From: apple!jordan(Jordan Mattson)
Subject: **Information on Macintosh II and Macintosh SE ROMs**
In reply to a request from Joel West for information from Inside Macintosh Volume V:
The new features of the Macintosh II and Macintosh SE are included in the 256K ROMs present in these Machines. The Macintosh II and Macintosh SE have different 256K ROMs. What follows is a summary of

IBM PS/2 versus MAC II

From: jww@sdcsvax.ucsd.edu (Joel West)
Subject: **Mac II vs. IBM PS/2**

Here's what I could come up with comparing the top end of the IBM Personal System/2 line with the Macintosh II. I think the Apple manages a win or draw in most categories. -- Joel West

	IBM PS/2 Model 80	**Mac II**
Availability	July 1987	May 1987
Processor	16 MHz 80386 20 MHz 4th Q	16 MHz 68020
Floating point CP	optional	standard
Color display	640x480, 16 of 256	640x480, 256 of 16M
Optional display	1024x768, 256 of 256K	1024x768, 256 of 16M (3rd pty)
Internal Floppy	3.5", 1.4Mb	3.5", 800K
Hard disk standards	ESDI (optional)	SCSI (standard)
Bus	IBM 'Micro Channel'	NuBus (IEEE P1196)
Width	32 bits	32 bits
Maximum slots	16	16
Number of slots	4 (+ 3 old-style)	6
Multiple bus masters	yes	yes
DIP switches?	no	no
Address assignment	vendor-based	slot-based
Existing OS compatible with prior machines		
	MS/DOS 3.3	Macintosh System 4.1
Multitasking	no	planned? (Bix says yes)
Availiability	now	May
Graphics interface	no	yes
Maximum memory	640K	8Mb
New OS	OS/2	A/UX
Multi-user	no	yes (?)
Multitasking	yes	yes
Availability	"1988"	"summer 1987"
Graphics interface	1989?	same

How does IBM's new 32-bit machine compare on a cost basis with Apple's recently introduced Macintosh II? The prices look pretty even until you start adding things, like a math coprocessor, to the PS/2.

IBM's PS/2 Model 80-041 Standard equipment:
16-MHz 80386, 1 megabyte of RAM, 1.44-megabyte floppy, 44-megabyte hard disk, 3 open 32-bit slots, keyboard , video card - Price: $6995.
Apple's Mac II Model HD40 Standard equipment:
16-MHz 68020, 1 megabyte of RAM, 800K-byte floppy, 40-megabyte hard disk, 5 open 32-bit slots, keyboard, video card, 68881 coprocessor, system software, 13-inch color monitor -
Price: $6996.

To the PS/2 to get features comparable to what comes standard with the high-end color Mac II, you have to add these options: 80387 math coprocessor ($795); 12-inch color monitor ($685); and the OS/2 operating system ($325), which lacks graphics and windowing (but IBM said a later version will offer a graphics environment). Add the costs of the options to the cost of the Model 80 and the price tag reads $8800. The difference in price between the PS/2 and the Mac II then runs to about $1800 -- more than enough to buy AST Research's Mac286 board ($1499) that enables the Mac to run MS-DOS programs.

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the extensions to existing managers and new managers in the Macintosh II and Macintosh SE, telling which machine has which features.

Quick Draw- Addition of Color QuickDraw Macintosh II

Color Manager- Supplies color-selection support for Color QuickDraw and provides a consistent way to produce color displays Macintosh II

Color Picker Package- A new package that applications can use to present a standard interface for color selection. Macintosh II

Palette Manager- Supports the use of a collection of colors when you draw objects with Color QuickDraw.

Font Manager- Addition with enhanced cached width support and a better font substitution scheme. The FractEnable routine has been put into ROM and various bugs have been fixed. On Macintosh II, color font support and cached synthesized strike support has been added. Macintosh II and Macintosh SE

Tool Box Event Manager- The keyboard message has been enhanced to make provision for multiple keyboards and 16-bit character codes. Also, new global variables have been added to help you distinguish among keyboards. Macintosh II and Macintosh SE

Window Manager- Additions to support Macintosh II color. All changes are backwards-compatible, therefore existing programs on monochrome ROM will continue to work and produce the same screen display as before. Macintosh II

Control Manager- Additions to support Macintosh II color. All changes to support color controls are backward-compatible, therefore existing programs based on the monochrome ROM will continue to work and produce the same screen display as before. Macintosh II

Menu Manager- Additions to support Macintosh II color and hierachical menus. Bug fix to DrawMenuBar. Macintosh II and Macintosh SE

Text Edit- Addition to support font, style, size and color variation. Script manager support. Bug fixes. Backward compatiable. Macintosh II and Macintosh SE

Dialog Manager- Addition to support Macintosh II color in dialogs and dialog items. Macintosh II International Utilities- Addition to support Script Manager. Macintosh II and Macintosh SE

Script Manager- New features. Allows applications to function correctly with non-Roman writing systems as well as Roman writing systems. Macintosh II and Macintosh SE

Notification Manager- Allows background activities to send messages to the user in a simple and consistent manner. Macintosh II and Macintosh SE

Control Panel- Has been modified to be expandable. Macintosh II and Macintosh SE

Start Manager- New feature. Coordinates the initialization and system startup procedures on the Macintosh II. Macintosh II
Apple DeskTop Bus- Information on writing special device drivers that interfaces devices using the Apple DeskTop Bus. Macintosh II and Macintosh SE
File Manager- Information on writing an external file system. Macintosh II and Macintosh SE
Printing Manager- Moved from system file in ROM. Addition of low-

level printer calls in the form of new predefined parameter constants for PrCtlCall. New error codes for the LaserWriter have been added. Macintosh II and Macintosh SE

Device Manager- Modified to support slots. Macintosh II

Slot Manager- Contains routines that let your programs identify cards plugged into NuBus slots in the Macintosh II and communicate with the firmware on each card. Macintosh II

Deferred Task Manager- Provides improved interrupt handling for Macintosh II by allowing lengthy tasks to be deferred. Macintosh II

Disk Driver- Modified to provide logical drive numbers that may not correspond to physical drive addresses. Macintosh II and Macintosh SE

Sound Manager- Replaces the Sound Driver. Gives a more flexible way of doing sound generation, while still supporting the data structures, routines, and synthesizers of the 64K and 128K ROM Sound Driver. Macintosh II and Macintosh SE

AppleTalk Manager- Enhanced through addition of new protocols and increased functionality of the existing interface. Macintosh II and Macintosh SE

Vertical Retrace Manager - Enhanced to provide flexible, slot specific video interrupt handling on the Macintosh II. This is how multiple screens are supported. Macintosh II

Shutdown Manager- Provides a consistent way to reboot and turn off the Macintosh, from the Finder as well as from within an application. Macintosh II and Macintosh SE

Resource Manager- Placement of certian resources in ROM on Macintosh II and Macintosh SE. Macintosh II and Macintosh SE

Hope this helps to outline some of the toolbox additions and changes on the Macintosh II and Macintosh SE. If you have any questions, feel free to contact me. Also, Inside Macintosh Volume V will be available from APDA (Apple Programmer's and Developer's Assoication) Jordan MattsonUUCP: ucbvax!mtxinu!apple!jordan
Apple Computer, Inc.
Tools & Languages Product Management
From: apple!jordan(Jordan Mattson)
Subject: **Notes on the Script Manager**

In response to Joel West's posting on the Script Manager. Both the Macintosh SE and the Macintosh II have the Script Manager in ROM. The Script Manager supports all writing systems (scripts). It is not just for non-Roman (based on Latin) scripts. In fact, text edit now uses the Script Manager, and all calls when processing English text go to the Script Manager and from there to the Roman Interface System (RIS). The Script Manager does not support any script directly, but rather, based on the script in use, calls a Script Interface System (SIS) to perform the specific procedure calls needed for a given application. So what you have is a layered architecture that looks like this:

Application
V
Script Manager
V
Script Interface System

At present there are three Script Interface Systems: Roman Interface System (RIS), Kanji Interface System (KIS), and Arabic Interface System (AIS). A Hebrew Interface System (HEIS) and a Hanze Interface System (HIS) are under development. A Kanji dictionary is not built into the ROM of the new machines, instead if you are using the Kanji Interface System on the new machines you would load Kanji like a font. The Kanji Macintosh, which is distributed in Japan, is the Macintosh which has been modified to have a Kanji dictionary in ROM. The Script Manager is included in the ROMs of the Macintosh SE and the Macintosh II. It will be available as a system patch in the Universial System Disk, which will be distributed later this year. Therefore, the Script Manager will be available on all of our machines. I hope that this information will clear up any confusion that might be present.
Jordan Mattson
Apple Computer, Inc.
Tools & Languages Product Management

From Infomac
Subject: **Coral Lisp on Mac II**

In reply to Rich Alderson, I have pre-release Coral Lisp, which they recently got working on the Mac II, and it's impressive. Chris Fry's version of the Lisp Machines' "Inspector" -- for browsing nested data structures by clicking -- is now fast enough to be very useful. If Henry Lieberman's "Stepper" runs as fast, this could be a great environment and product. (Stepper lets you watch programs run by seeing lisp code with returned values successively substituted, and even lets you go run them backwards in most cases.)
The other big Mac II improvement is disk IO. The internal 20M seems to be about 3 times faster than the dataframe (I don't know if it's transfer or seek). This especially effects the time to load or reload your Lisp environment after a crash. This was excruciating on the Lisp Machines, and got worse when systems or patches had to come over a network on a shared file system. Without fast "World load" capability (which I imagine Coral Lisp will acquire), the current version loads on a Mac II in 40 seconds or so.

From Usenet
From: elwell@osu-eddie.UUCP (Clayton M. Elwell)
Subject: **Macintosh II Stuff**

Well, folks, I have good news and I have bad news. The good news is that LightspeedC on the Mac II is a wondrous sight to behold. As a test, I recompiled the Blob Manager (12,000+ lines of code). Off of the (somewhat slow) internal hard disk (Seagate 225N), it took 53 seconds. Off of a RAMdisk created by Ramstart 1.3, it took 26 seconds. That is not a typo. About 1 module per second. The general speed of the machine also has to be seen to be believed. This is the machine I want on my desk at home!
The bad news is that out of the set { MacTerminal, MacKermit, UW, Microphone }, only Microphone runs. MacKermit bombs immediately, probably because of SUMEX C's funky relocation scheme. This is not a good sign.
More news as it happens....
PS. Being able to set your own SysBeep() is great fun!.
From: Fred Huxham
Subject: **Re: Macintosh II Stuff**
In article <3361@osu-eddie.UUCP>
Since all MacII's in existence are PROTOTYPES (ie, not finished), saying what does and doesn't run now isn't very useful information.
Applications that follow the rules (which are bashed into developer's heads over and over) will run on a MacII.
Happy Programming, Fred

Info-Mac digests consist of submissions by individuals on the academic computer networks. Submission and distribution of these digests is by network, moderated by volunteers at Stanford University.

Usenet is a loosely coupled network of co-operating academic and commercial computer systems. It is a non-profit network whose primary aim is the sharing of technical information and the spreading of research results.

Delphi is a commercial time sharing and bulletin board system. The Delphi Digests are made available thanks to Jeffrey Shulman of Rutgers University.

MacSeptember
18-20 September 1987
at NottinghamUniversity

East Midlands
Mac User Group

MacSeptember is a new learning experience. It is aimed primarily at committed Macintosh users in the health, education, engineering and business fields. But whatever your level of experience you will be most welcome at MacSeptember. The tutorials will be led by experts and the accent will be on small group workshops and hands-on experience. You will be expected to bring your own Mac along. Residential accommodation (single rooms only) is offered at Cripps Hall, Nottingham University. The weekend is offered at an all-inclusive cost of £75 per private individual, (£120 for company-sponsored individuals).

The conference commences with dinner at 1900 hours on Friday, 18 September

Provisional workshops and tutorials

Saturday 19 September	**Mac for Beginners**	**DeskTop Publishing**	**Programming**	**CAD**	**Music on the Mac**
	Nick Helm *Good housekeeping*	John Barker *Good design and layout*	Paul Russell *Introduction to Pascal*	Adrian Harms *2-D drafting* *3-D drafting* *Architrion*	Tony Johnson *Music sequences packages*
	Bruce Stidston *Word processing*	*Design clinic (bring your own)*	Paul Russell *Mac-specific Pascal*	*& Schema*	Tom Orellana *Midi and the Mac*
	Paul Beaumont *Communications*	*DTP packages compared*	Paul Whitby *Workshop*	*CAD Project* *Model building*	Karl Bown *Jam factory* *Music creation*
	Clive Wilson *Spreadsheeting on the Mac*	Bruce Stidston *Design Project*	Chris Roper *New Software*	*CAD Project*	Francis Hughes *Composition*
Sunday 20 September	**Hardware Workshop**	**The Caring Mac**	**Business applications**	**Artificial intelligence**	**Laserwriter Special**
	James Sanson *Plug in Power*	Karen Gowing *Mac for the deaf*	Neil Watson *Omnis 3*	Tony Hasemer *AI Theory*	Paul Whitby *Hardware*
	Philip Bath *SCSI hard disk* *Theory/practice*	Roy Stringer *Headstart* *Workstation*	*Omnis 3* *Practical*	Tony Hasemer *Prolog* *Workshop*	Yorick Phoenix *Software* *Utilities*
	Nick Fegen *Networking*		Steve Ramsden *Accounting Packages*	Sak Wathanasin *Hypertext* *Databases*	John Armstrong *Postscript* *Workshop*

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Ring/write for our conference brochure

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Hallfort Ltd
93 Belper Road, Derby DE1 3ER.
Tel 0332 364574

ADOBE ILLUSTRATOR

by Irene Flaxman

We first saw news of the Adobe Illustrator in January, when it was launched at MacWorld in San Francisco. The program looked promising from the start, and we have now had a brief chance to look at it. April saw the European launch at Rotterdam MacWorld, and the UK launch at the Business Design Centre in London.

The UK launch was very well organised, with three separate presentations - for the Press, the Dealers, and the VIP's. Guest speakers were Charles M Geschke (Executive Vice President of Adobe Systems Inc.), Martin Boothman (Managing Director of Allied Linotype Ltd.), Michael Gray (Managing Director of McQueen), and David Hancock (Managing Director of Apple Computer (UK) Ltd). Four businessmen out to impress and promote a new product in as powerful a manner as possible.

The presentations were impressive, as was the demonstration after the speeches had finished, and there was even a chance to get some 'hands-on' experience after the traditional question-and-answer session.

The program is a development from the in-house routines used by Adobe staff to create their downloadable fonts. It is described as 'a powerful art production tool for producing high quality line art and illustrations'.

One of the first users was the New York Times, which was given a Beta version for testing. Within a fortnight, they were including Illustrator line-art drawings in their publication.

The sample graphics are impressive - from the nurse and lady golfer we have all seen so often now, to the full-colour illustration of Tutankhamun. Four-colour separation is not automatic, but this is expected to be a future development.

The marketing is impressive, and includes a few new ideas. The package comes complete with a user manual and quick reference card, but also includes a training video. This lasts about 35 minutes, and takes you through the basics of using the program. I must admit that it's a good idea, as it cements the techniques you will come across when you start working your way through the tutorial. We haven't had sufficient time to try out the program properly, but we will be including a full review in the next issue of the magazine.

It should knock 'TextEffects' for six - after all, you can actually create your own effects with Illustrator and save the resulting files for future reference or future use - unlike TextEffects, which allows a limited number of special effects to be created, and will not allow you to save the files. At least Illustrator will allow you to print a proof on the ImageWriter, too - important, when you consider the costs of LaserWriter printing! I wonder whether this is due to the popularity of bureau services in the USA, as use of these makes it essential to be able to proof on the ImageWriter.

The question-and-answer session raised some interesting points from the four businessmen put into the spotlight. The program is currently available only for the Macintosh, although other versions are being developed - it is the Mac interface which makes it ideal for developing a program such as this, and the competition is some way behind - an IBM version cannot be expected until 1988 at the earliest.

The age-old question about copy-protection came up again. We are all against these safeguards, even though we can see why software manufacturers do feel the need for them. The Illustrator is copy-protected, but one interesting fact came to light. When a purchaser registers with Adobe in the States, a backup copy will be despatched. This will be personalised for the individual concerned, but it will not be copy-protected. Apparently, the same is not true of this country. McQueen are the distributors, and they will not be following this guideline - the backup copies supplied in the UK will be copy-protected!

There are many alternatives used for copy-protection, and I can see why the manufacturers feel it is necessary to implement one of the methods, particularly when hard disks are sold with software already resident. This method of personalising the disk does seem an acceptable alternative, as it would allow a bona-fide user to make legitimate copies for their own use. The whole question of protection is being examined, of course, and it is hoped that it will be relaxed - it was good to see that Microsoft have dispensed with their protection completely.

There was a discussion of standards and guidelines for postscript program developers. Adobe and Apple have apparently worked with the various standards bodies, with a view to creating an accepted standard for page-description languages and programs, and to ensure

that the standard is accepted and understood by all. The specification is freely available, and should encourage future developments.

The other perennial question is, of course, price. Why is it that UK prices are always so much higher than those in the States? Considering that the American market is made up of a population who are generally much wealthier (in real terms) than we in the UK, it seems doubly unfair - after all, a higher price there would probably not be noticed, but a higher price here means that we must seriously consider before buying. The increase in price is often not obvious until you think about it - the number of pounds sterling is usually equal to the number of dollars - but, when you consider that the exchange rate is around 1.5 dollars to the pound, the higher costs do hit home. We asked why there should be such a variation in price - after all, import duties are not that high and VAT is added as an afterthought. We did not get a satisfactory answer - we were simply told that the channel structures are different, and therefore the price has to be higher. OK, we can accept that UK distributors have to meet local advertising costs, whereas US distributors can ride on the back of the manufacturers' advertising to a large extent, but this cannot account for the full difference - the sums involved are far too high. It seems that manufacturers and distributors are still 'in a world of their own', but we understand that dealers are complaining about the price differentials, and the users are certainly complaining about the price differentials - so come on, Apple, do something about it!

Linotype's presentation was also of interest, with news of a new addition to their range in the near future - the Linotronic 500. Although the resolution will not be as high as the 300 (max. 1700 lpi), it will be able to print to A3 size. Again, the presentation was very professional, and there were plenty of representatives around to demonstrate the equipment afterwards. I always feel, though, that these displays are misleading - the RIP interface is never obvious, and (unitl I visited a typesetter recently) I had not appreciated that the process used special paper and needed a separate processor for 'developing' the image - I had always assumed that these machines worked on a similar principle to the LaserWriter.

Program Overview

We will be including a full review of the program in the next issue, when we have had a chance to try out all the facilities. However, we can include here a brief description of some of the features and facilities of the program. Illustrator is primarily for the production of line-art graphics, with the abilities to 'paint' areas in shades of grey, to specify line widths to a fraction of a point, and to incorporate (and manipulate) text.

The basic method of working is based on the bézier curve principle, relying on two anchor points and two direction points to define each curve. This takes a little getting practice, but soon becomes second nature. The most difficult task is in determining where to place the anchor points! If you find that the curve you have drawn isn't the correct shape, it can be adjusted by dragging on the curve itself, the anchor points, or the direction points - deciding which tactic to use is again a matter of practice. Straight lines are defined by means of two anchor points only, and can be costrained to the vertical and horizontal, if you wish.

The most obvious difference between Illustrator and other programs, is the fact that you can use an existing piece of artwork as a template. The template can be in MacPaint or PICT format, and it is anticipated that often a scanned image will be used as the template. By tracing around the template, the image can be 'cleaned up' and improved upon, to produce a very crisp final image. A preview facility is available, so that you can see how your picture is taking shape; and, as several windows can be open simultaneously, it is possible to view the picture both as 'artwork' (for editting), and as 'preview' (to assess the effects) on a split screen.

The program makes use of the shift key and the option key for constraining or adding additional functions - e.g. the zoom tool will allow four levels of magnification (i.e. 200%, 400%, 800%, 1600%) when you select the tool and click on the artwork. If you hold down the option key while you clisk with he zoom tool, this reduces the size of the image - again, this allows four levels (i.e. 50%, 25%, 12.5%, 6.75%).

One feature that I found confusing was the use of rulers. The scales are in picas, and the markings on the scale vary for each level of magnification. There are no options associated with this, so you cannot choose to measure in inches, for example, and you cannot choose the scales of the rulers.

It is possible to obtain a '3D' effect, using shades of grey - to achieve this requires practise, as the effect must be built up in layers which are then positioned so as to give the desired effect. Text and graphics can be copied, rotated, scaled, distorted, mirrored. The processes involve setting an anchor point, about which the program will perform the function you have selected. This differs from other programs I have used, and I found it a little clumsy at first.

As mentioned above, the artwork can be printed to the ImagWriter for proofing. The drawing area is divided into five pages, with the main (central) area being page 5. If you draw too close to the edge of the central area, you may find that several pages will be printed, so it is worth proofing before going to the Laser. As printing progresses, the page numbers are displayed, and I found it a little confusing to find that I was printing page 5, when I had created only one page!

Files are saved as PostScript (which can then be edited with a word-processor program, if you wish), or as Encapsulated Postscript for use with page-composition programs (either Macintosh or IBM PC formats).

If you would like to see a running demonstration of the Illustrator, this is now available from the MacSig library.

The cost is £450 + VAT.
Adobe Illustrator™ is distributed by McQueen, Elliott House, 8-10 Hillside Crescent, Edinburgh, EH7 5EA.
Also available from your local Apple dealer.

TellStar II

Christopher Walker reviews the Macintosh version of this astronomical display and information program.

Manual Hardly Necessary

TellStar II is an astronomical display and information program. Versions have previously been available for the Apple II and IBM, and it has now been adapted for the Mac (512K or MacPlus). As for the best Mac programs the manual is hardly

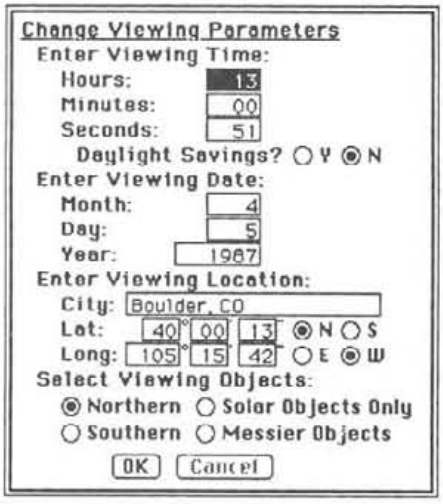


Figure 1a

necessary, at least for anyone who has an elementary knowledge of astronomy.

The present version 1.0 dates to November 1985 so it appropriately includes Halley's Comet (visible on the Mac until 1991). Using the old System on the TellStar disk one simply starts up by double clicking on the TellStar Startup icon. If you transfer the program to a disk using System 3.2 and Finder 5.3 the Startup icon produces a false start and returns you to the Desktop; click on the document icon TellStar instead.

An initial screen (fig. 1a) allows you to determine at what place and time you are supposedly viewing

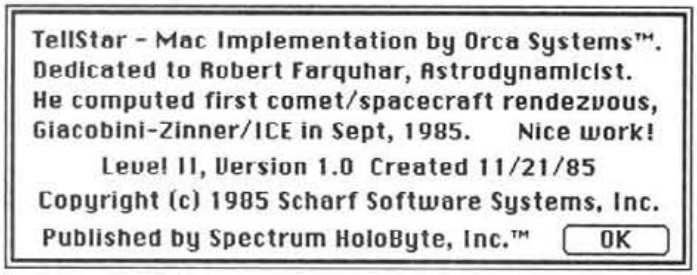


Figure 1c

the stars; the default location is Boulder, Colorado, the location of the USA's high-altitude observatory. You also chose whether you want to see the northern or southern sky, and whether you just want a quickie view of the planets, or all the stars as well (which takes longer). Choosing to see the stars of the Northern Hemisphere and clicking the OK button sets the Mac to work (a separate screen, fig. 1b, allows you to follow its progress) calculating the precise location of 249 objects (sun, moon, planets, stars, Halley's Comet, etc.) and 2 minutes 20 seconds later you see a miniature overhead view of the sky at your chosen location showing stars of 40° elevation and higher (fig 2). If instead of imagining yourself lying on your back you want a more comfortable horizon view just click on one of the directional buttons in the lower right part of the screen and in a few seconds the Mac comes up with the appropriate view (fig. 3).

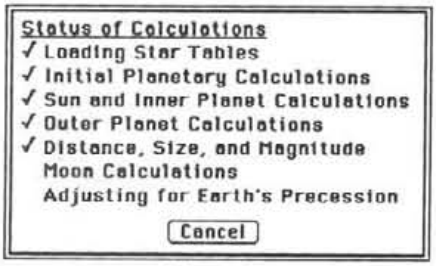


Figure 1b

Click on the OverHead square to return to the first view. The sun, moon and planets are larger or smaller blobs, the stars are small crosses and "Messier objects" (galaxies etc.) are squares. The moon and Venus change shape according to their phases. The letter C represents the name of a constellation. On the star pictures the mouse-driven pointer becomes a crosshair (near the moon on fig. 3). Place the crosshair over an object or a C and double click to get a small screenful of technical information (fig. 3 top right).

The Apple menu has an item About TellStar which gives the usual credits (fig. 1c). The File menu gives Save New Location Data (in case you do not live at Boulder), Print Screen, Print Sky Map, and Print Data. The Edit menu items Cut, Copy and Paste work only on DAs; you cannot copy information out of TellStar other than by screendumps to MacPaint.

The View menu has several nice items. Locate Object changes the screen to whatever view is best for the star of your choice, flashes it,

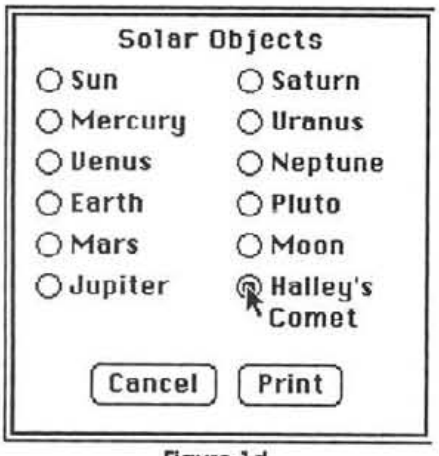
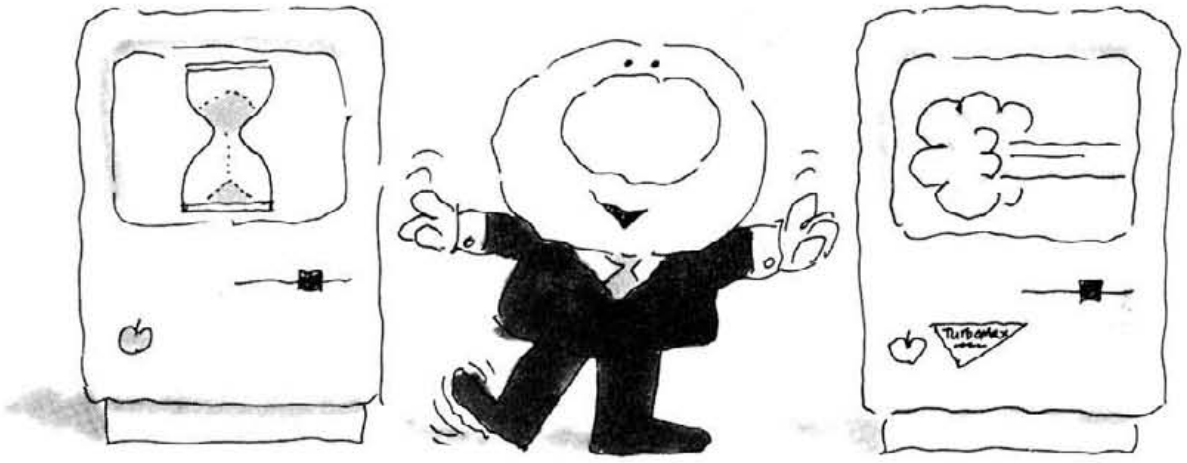


Figure 1d

and gives you the technical data. Look Left/Right moves horizon views around 45° at a time. Show Constellations joins up the bright stars of a constellation with lines (as fig. 2). White/Black Sky reverses the colour of sky and stars. Show View Parameters returns the details at the top right corner of fig. 2, and Change View Parameters allows you to change the clock or go traveling,and sit back for another two minutes which the Mac thinks it all



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out again.

If you need them then the Utilities menu gives you Equatorial to Horizontal, Horizontal to Equatorial and Ecliptic to Equatorial conversions and Precession since 1950 for given coordinates, while Solar System Objects calls up another small screen (fig. 1d) for quicker selection of technical data (presented as on fig. 3).

Finally the © menu has a single item Programmers' Plea, which reminds anyone illicitly copying the program of "the thousands of hours we spent developing it". They trust you. TellStar is not copy-protected.

They call it an educational and recreational program. I was happy to play with it for an afternoon. The limitation to 249 bright objects (or 235 in the southern hemisphere) means that the program has little practical value for serious astronomers. It could be useful for school courses in astronomy or for practical exercises in spherical trigonometry. There are two major drawbacks to the program. You cannot add to the data already stored in it, so you are absolutely limited to the standard 249 (or 235) objects. And many of the stars are given their old Arabic names rather than the standard Greek letter and Latin constellation name (e.g. Alpheratz for Alpha Andromedae). How many astronomers really use the Arabic names now? Some star names are even Americanized; e.g. Beta Arietis = Sheratan has become Sheraton (the hotel in the sky?). The manual has a list of the stars and their Latitude and Longitude for identification; but it does not tell you that Beta Arietis is Sheraton. If you ask for Beta Arietis in the Locate Object dialogue you simply get the answer "Object not in tables".

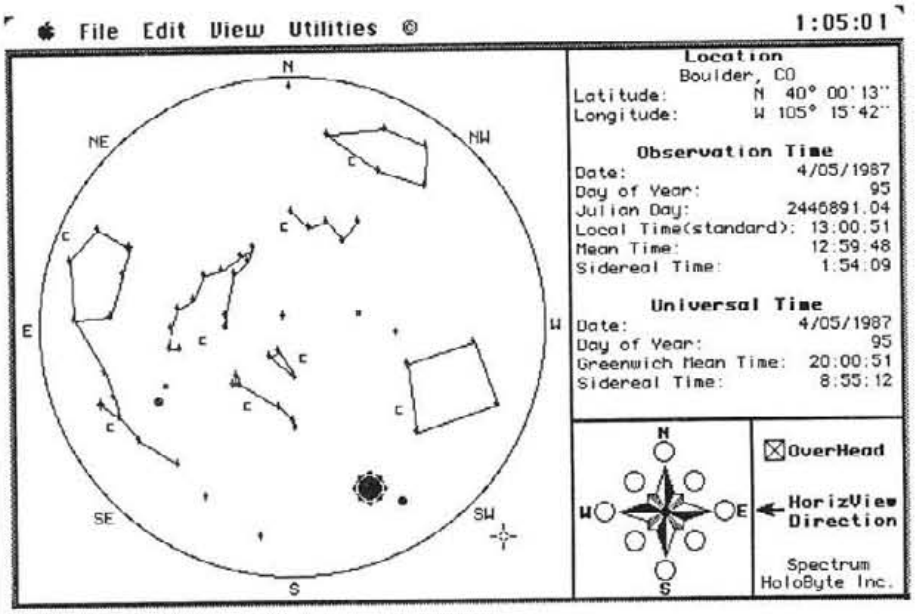

Figure 2

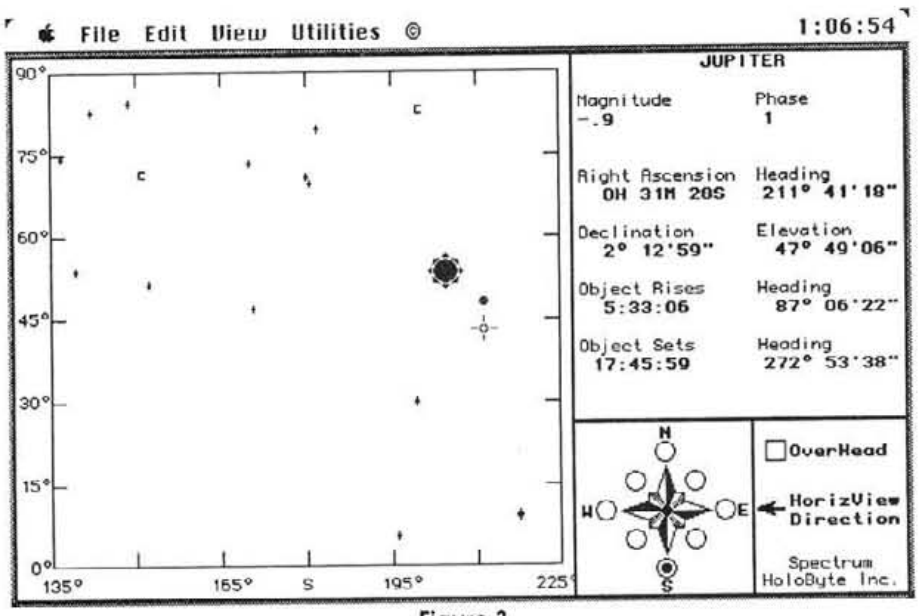

Figure 3

The authors certainly expect the program to last; its time-span is from 0 to AD 3000. After that it can be trashed in the Black Hole. The price of TellStar II in the UK is about £80 + VAT; in the USA it can be bought for as little as $45. That's more like it!

TellStar 2 - Price - £49.95 Available through MacSerious, 17 Circus Place, Glasgow G3 6AH Tel 041-332-5622

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Micro Planner Plus

Nick Hunter reviews the most sophisticated Project Management program available for the Macintosh.

Project Management

Micro Planner Plus is a Project Management program used for the control of time, resources, costs and Project Progress.

The package consists of two disks (system & program v 5.7) and an excellent manual. This 303k test was run from a MacPlus built-in drive with the system in RAM.

MP+ is a most useful resource management and project control tool which provides the vital schedules for management action and to record progress.

Entering Data

After a Title Screen, a circle appears on screen. This represents an *event* (or *node* or point in time), and signifies the start or end of an operation or *activity*. A single click centralises an activity on screen and a double-click opens it.

To create an *activity* you click in the circle and drag an arrow from it (usually towards the right of the screen or forward in time). Activity types available include ladder, lead, lag, start and finish and all require the following five entry steps:

- Drag the arrow to create a new node
- Number the node
- Label the arrow
- Assign it a time duration
- Click OK to accept

This is rather pedestrian, and I would have preferred the option of batch-mode entry and more ease of changing nodes here. Activities can however be easily deleted and the network 'repairs' itself.

Clicking-on an activity centres it, and this allows the user to trace all over a model following successive links. For a quick jump to any point, the Locate menu gives instant access via the node's number.

After a series of events have been created, linked, named and assigned times, the model is ready to Time Analyse. In this process the earliest Start and Finish dates for all activities are worked out.

MP+ offers both Time and Resource Analysis:

- **Time analysis** tells you how early each operation could start and finish.
- **Resource Analysis** shows when each operation should start to make the best use of the available resources.

Program Output

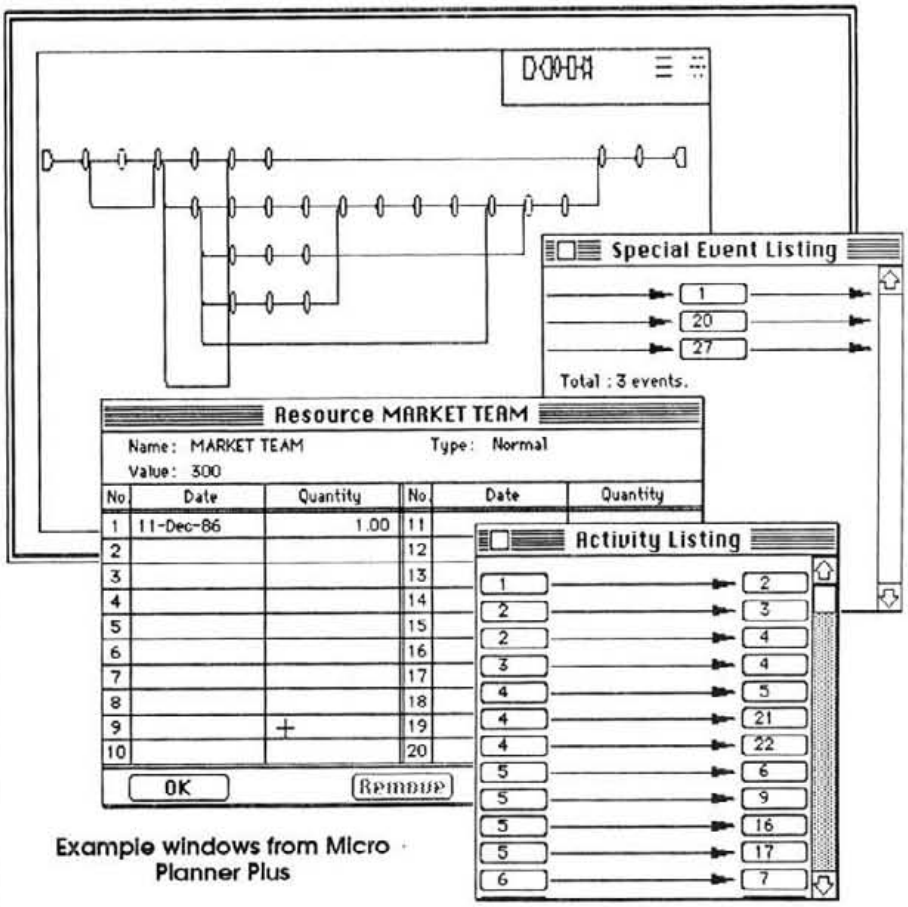
The main types of output are:

- Resource Analysis Charts and Histograms
- Bar Charts
- Activity Listings
- Progress Reports
- The Network model itself
- Key Event Reports
- Full Listing of all activities
- Short-term Schedules

The Bar Charts are very comprehensive with both early and late Start and Finish dates for each activity which can have three levels of descriptive label - Zone, Responsibility and Description.

Histograms can show Resource Usage, Cost or Total Cost (of all resources) either daily or cumulatively. This is very useful to track project cash flow demands.

The overall Network can be printed full size or in summary form. My 27 node book preparation project would have taken 14 pages across to print full-size, but a sideways 50% print reduction cut this to three - which were very suitable for binding into a report.



Example windows from Micro Planner Plus

This way of portraying project details is bound to impress Company Officers, Financiers or your Bank Manager. The network diagrams, histograms and bar charts can also be printed in colour on the Imagewriter II.

Resource Management

One of the essential uses of MP+ is its facility to maximise resources such as labour, equipment, finance or materials. One outstanding feature is its **bulldozer technique** which estimates larger resource demands as **humps** and times when they are less in demand as **hollows**. It can bulldoze the humps into the hollows (within the criticality of the program) by delaying certain operations within the float-time available, to effect the most wise management of resources.

The program will split activities to balance the needs of different resources, and the user can specify operations to be **split** or **non-split**. You can also decide whether to **overload** the resources or **delay** your deadline. If used without overloading, you can find the latest time with available resources.

Sophisticated Features

MP+ offers numerous sophisticated features including:

- A **Reverse Logic** mode in which a choice of more than one activity is given; whichever first becomes available is then acted on.
- An **Overlapping Structure** (including lead time) which allows a first operation to lead to a second. This is especially useful in planning fast-track projects where successive activities are commenced before the expiry of the preceding ones.
- **Forward or Backward Passes** are carried out which calculate the latest times and spare time (float).
- **Earliest and Latest Dates** can be put on the path at will.
- **Deadlines.** You can force the latest dates for activities by entering dates which must be met. If activities have no spare time available, the program will apply a deadline to their execution - which makes them critical. Deadlines can also be applied to nodes and the end of the project.
- A **Super-Critical Path** which shows all activities which hinder completion within deadline dates. If any deadline is created too early, MP+ will show the path which prevents the user meeting it.
- A **Hammock** facility which allows the bridging of intervening details and reporting in simpler summary units.
- **Key Events** (or milestones) can be nominated which allow milestone reports to be prepared.
- **Archiving.** Results can be archived allowing Comparison Progress Reports - this is vital for progress monitoring.

Several calendars are offered and up to six can be used on any project. Any operation can be assigned a full 7-day week, no Sundays, no weekends, weekends only or even the Saudi week, but if none of these are suitable, you can create your own. If extra holidays are added into the calendar, allowances will be made for these in resource apportioning.

Another calendar to which dates may be assigned is for no working days - this is useful for notifying official permissions, the results of which affect subsequent project stages.

Comparisons With MacProject

MP+ is very different to the simpler MacProject. Firstly Project has the activity **on the node** (it uses boxes to denote activities) while Planner has the activity **on the arrow** (or between nodes).

Planner scores over Project by being able to go into great detail over the allocation of resources for every project stage, and generate the data which management need to get the job done. It is the logical upgrade from Project, and picks up where Project leaves off.

Casual users should start first with the simpler MacProject to get their overall planning right, then make the upgrade as the limitations of Project become a hinderance.

Program Deficiencies

One shortcoming was the lack of keyboard access to some commands. The <CR> key could not be used to enter some data - instead you have to click on an OK-button. Neither Cmd-S (to Save) nor Cmd-P (to Print) responded from the keyboard, so the Macintosh environment is not being completely utilised.

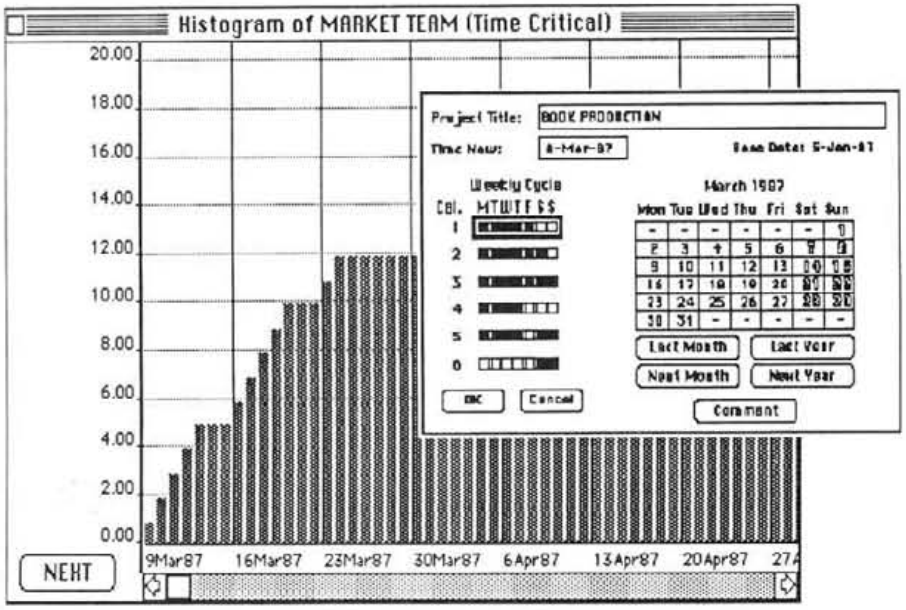
MP+ also forces you to enter a time duration for every project stage, which you may not want to do if processing data in batch mode.

Some steps in data entry are cumbersome as the sites on screen are not clearly defined. I had to search hard to find the **Zones:** text entry point which could really do with a clearer marker.

The **manual** is excellent - with numerous screen diagrams, and separate commands everywhere clearly labelled in bold type with square bullets. The logic behind commands and program philosophy is explained (in fine type) and is very easy to comprehend. No complaints here!

Interchanges With Other Programs

Data transfer to MacDraw is a



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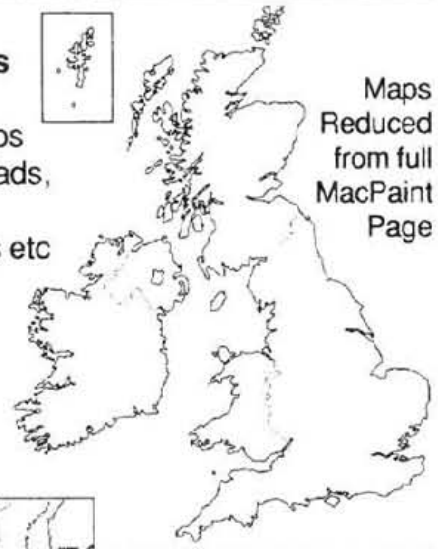

Maps Reduced from full MacPaint Page

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Business Forms **£45.50**
Ready-to-use Business forms stored in MacPaint format - over 40 forms on 2 discs all with relevant space for headings etc. Can be read by FullPaint, SuperPaint etc.

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As Business Forms but contains more forms all stored in MacDraw files for perfect output to the LaserWriter - also includes Scrapbook containing all forms in 'Picture' mode for transfer to programs including MacDraft, Write, Word etc

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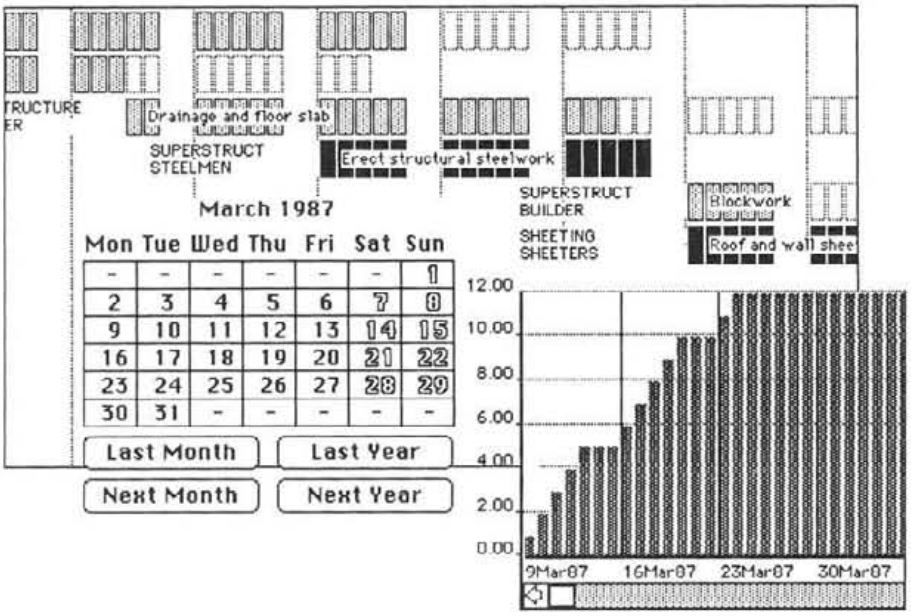


standard option, and histogram data can be transferred into Excel or Jazz. Network information can be moved to the clipboard.

An extension to MP+ is available called **Project Exchange** which will be reviewed soon.

This allows the import and export of project details (through DIF files and text documents) into packages such as Omnis, Excel and from MacProject.

Summing Up

Micro Planner+ is comparatively easy to learn, requiring about five hours work to assimilate its main elements. For serious business users it is the most sophisticated Project Management program available for the Macintosh, and represents **excellent value.**

It has most of the features normally found in mainframe-level software, and offers output which is far more elegant than IBM users (poor souls!) can get from Primavera, Pertmaster or similar packages.

Micro Planner Plus is available from:

Micro Planning Software Limited
34 High Street
Westbury on Trym
Bristol BS9 3DZ

at a price of £495.00 + VAT.

****** HIGHLY RECOMMENDED ******

Why no SE ROM Upgrade ?

Dougal looks at the new ROM's and why no upgrade was offered, he also gives a little secret out to SE owners.

The original Mac had just 64k of ROM, while the Plus was given 128k. A ROM upgrade was then required to bring the benefit of 800k drives, HFS and some extra speed to the non-Plussed. The SE now has 256k of ROM, and some folks have beeen wondering whether an SE-type ROM upgrade ought to be made available.

The short answer is no. An SE ROM would be useless in a Plus logic board. Before I explain why, let me say that the 128k ROM and 800k drive upgrade has been very reasonably priced by Apple. They want everyone to use 800k discs. They are right. The 400k originals are pitiful by comparison. If you haven't yet upgraded, don't wait any longer, just do it.

Now, the Mac "System" file, in RAM, provides the accredited means of addding any new goodies. The ROM is only for the fundamental building blocks of low-level code, mainly catering for the hardware.

The hardware of the Plus is broadly similar to the 512, but the changes to the SE are much deeper. As such, it's ROM does hold one set of entirely new routines, the driver software for the Apple DesktopBus . Other things like the SCSI routines may have been extensively re-written, but this was required anyway to provide the same functions with the new hardware, it is the combination that delivers the slightly higher performance. It follows from this that the Mac)(needs another different ROM.

To have added any extra facilities in ROM would be to wilfully deny them to owners of the Plus, at the very moment when Apple are trying to market a range of machines with different powers and prices which are software compatible.

I have heard that ADB drivers and re-writes took the code size up from 128k to 167k. However, standard ROM sizes and production economies lead to Apple using 256k of ROM, which contains 89k of elaborate copyright notice.

You didn't know? Well...

If you have access to an SE, or even a nearby dealer's showroom, do have a go at this. It is guaranteed to amaze all who see it...

1. Boot an SE from any disk. (Eject it if you like.)
2. Press the Interrupt switch - the back of the Programmer's Switch.
3. Engage Caps Lock
4. Type:

G <Space> 41D89A <Return>

And you should be looking at the Hall of Fame!

But then, we all knew about the signatures inside the original Mac's case, didn't we?

Incidentally, explaining all this does not appear to be part of any dealer sales training course, so don't go asking awkward questions, please.

Read about Dougal's exciting dive into the Mac II in the next issue of Apple2000

SUPERPAINT

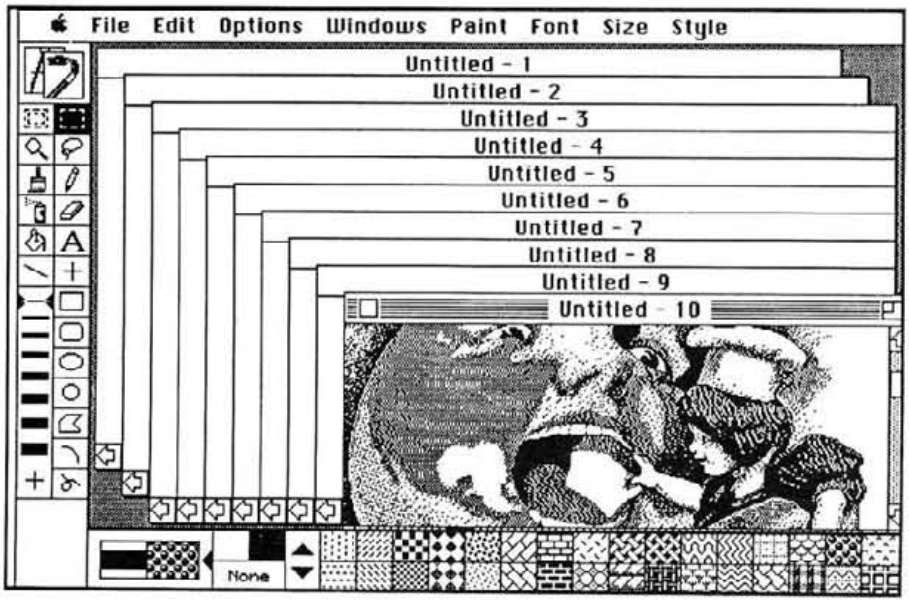
by Irene Flaxman

Superpaint, from Silicon Beach Software, combines facilities familiar to users of both MacPaint and MacDraw. The publishers admit that "in its present state, SuperPaint is not intended to be a replacement for MacDraw". However, further 'Draw' features are promised in future versions, and they claim that "SuperPaint is the best paint program currently available for the Macintosh". It is dangerous to make such a sweeping statement, but the program certainly handles both sets of tasks very neatly, and has a number of useful features added to the original programs' specifications.

Up to ten windows can be open simultaneously (subject to memory), and you can easily move between windows by 'clicking' them into activity or by selection via the 'windows' menu. Each window has two layers - the Draw layer and the Paint layer. Each layer works independently of the other, with separate menus, and separate tool and pattern palettes.

The constraints of the normal Mac window can be eliminated - if you wish, you can move the pattern palette to the top of the screen, you can expand the picture to cover the full screen (hiding the scroll bars), you can hide the tool and pattern palettes, and you can even hide the main menus. (I found that the paint brush and spray can tools left a 'trail' in the main menu area when the menu had been hidden, even though I was not pressing the mouse button at the time - hopefully, this problem will soon be sorted out.) This gives you a substantially larger area to work on, and scrolling can be achieved by using the familiar hand (in this case, activated by depressing the spacebar), but there is also an autoscroll facility which is available when using any of the tools - as soon as you reach the edge of the screen, the image will scroll on for you unless you have disabled the autoscroll feature. This means that you can work on a much larger image than is possible with MacPaint; so when you need to view the full image, you should use the 'reduced view'. Unlike MacPaint, it is claimed that SuperPaint will make full use of big screens - I could not try this out, though, since I just have my basic MacPlus.

The two layers of your drawing are completely independent, and retain the features of Paint and Draw. However, you can copy selected parts of your drawings from one layer to the other very simply. Normally, selections cut or copied to the clipboard will only include the images from the currently active layer, but you can make a selection which will incorporate details from both layers by using a special tool accessible from either.



The choice of layer is made by clicking on an icon at the top of the Tools palette. The icon representing the currently active layer will appear on the top. It can be a little confusing when you try to edit a part of your image and nothing happens - this will be because you are trying to edit in the wrong layer! It is often difficult to remember which parts of the image have been created in which layer, so you can choose to hide the back layer - this makes it clear exactly what can be edited within the current layer, and you can revert back to showing both layers when you wish to see the full picture on the screen.

Fill patterns and line patterns are separately selected from the four pattern palettes available - the familiar bricks, weaves, etc.; laser greys; lines and stripes; or a plain palette for you to create your own patterns - you can even pick up a pattern from the screen, if you wish. In the Draw layer, you can assign colours to an object - separate colours to be selected for foreground (black on screen) and background (white on screen), for colour printing on an ImageWriter II. The line width utility has also been extended - you can select a constant line width by clicking in the centre of the line tool of the required thickness; but, by clicking to the left or right of the line tools, you also have the facility (in either layer) to select different thicknesses for vertical and horizontal lines with automatic scaling between - this can produce some interesting effects, particularly when drawing arcs or circles.

The familiar rectangle, rounded rectangle and oval shapes are joined by a circle shape and all four can be drawn from the corner or the centre of the object. This latter option makes it nice and easy to create concentric circles, for example. Other new tools include a perpendicular line and an arc. The familiar constraining rules are still there, although some (such as the circle) have been included as specific tools.

Text can be typed into your picture at any size up to 127 points, and can be filled with a pattern of your choice from any of the available palettes. In the Draw layer, text can be typed into either a fixed or an expanding 'text object' and of course the style, size, etc. can be altered after the object has been created. The same is not true of text typed into the Paint layer, which is subject to the usual restrictions of MacPaint and cannot be altered after you have accepted the text by clicking the cursor elsewhere - however, the full range of styles is available, with a choice of line spacings and justifications.

Three levels of magnification are offered (see examples, below), always with a normal size image shown to the left so you can see what effect your alterations are having. This is true of either layer, and all the tools will work in any of the magnfication modes - including the autoscroll features.

Editing brush shapes and patterns is simplicity itself, and a part of the screen (16 x 16 pixels) can be copied into either editing screen, to make it easy for you to create a new brush shape or a new pattern. These can be made specific to a particular file, or they can be included as a permanent addition to the palettes.

I was sorry to find that the brush mirrors are not available in SuperPaint - I was always fascinated by the shapes that could be created so quickly with this utility. However, there are other nice little utilities that are very useful - such as rotate, stretch, distort, slant, perspective, as well as the familiar 'old favourites' of invert and flip. It's also nice to have rulers and grids available in both layers, and they can be measured in inches, centimetres, picas/points or screen dots.

Fill patterns are normally opaque, and will obscure anything underneath. But, with SuperPaint, you can choose to use transparent paint so that only black areas of a pattern will cover the existing image, or you can choose to paint on black so that only the black portions of the existing image are covered. It's worth experimenting with these, as you can create some interesting effects.

SuperPaint will allow you to save your document in a number of formats - SuperPaint, MacPaint, PICT, or Startup screen. You may also select a part of your picture and save that as a new file.

Finally, no review of this program could be complete without a mention of LaserBits. This is a facility whereby you are able to convert a portion of your picture to 300 dpi, as opposed to the normal 72 dpi of the screen resolution. This makes it possible to edit the portion to a very fine degree, and gives superb results when printed on the LaserWriter. As the available memory acts as a constraint on this facility, the selected area will immediately (and automatically) be saved as a separate file which the program will access when the picture is to be printed. You can create as many LaserBits areas as you wish, subject to available storage - they must all reside on the same disk, so that they can be located for printing.

I liked the program, particularly as I could use both layers in the same picture. I've not used MacDraw extensively, so this involved a bit of learning on my part. I had used MacPaint, though, so I was pleased to find some new facilities which made working easier - even though I was disappointed to lose the brush mirrors. I think my favourite new facility has to be the autoscroll, which makes it so much easier to work on a large image.

The advertising leaflets highlight some of the features of SuperPaint. I don't often read such literature, but this does provide a useful summary to check against your requirements, as follows:

Full-screen editing

Multiple windows

Three levels of magnification

Reduced view

Create shapes bigger than the screen

Draw circles and squares from the centre

Text that can be edited

LaserWriter fonts supported

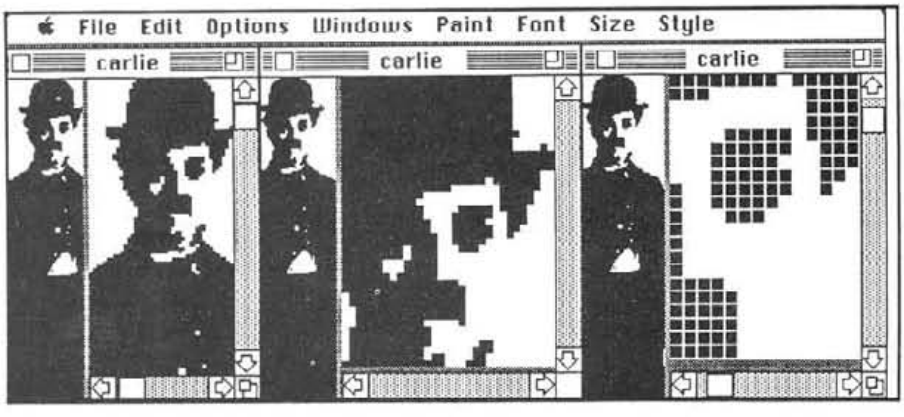
Open and save MacDraw PICT and MacPaint files

Print multiple copies

Colour printing on the ImageWriter II

Makes full use of big screens

SuperPaint (from Silicon Beach Software) costs £99, and is distributed in the UK by MacSerious (please see the back cover for the address). Alternatively, ask your local dealer for details.



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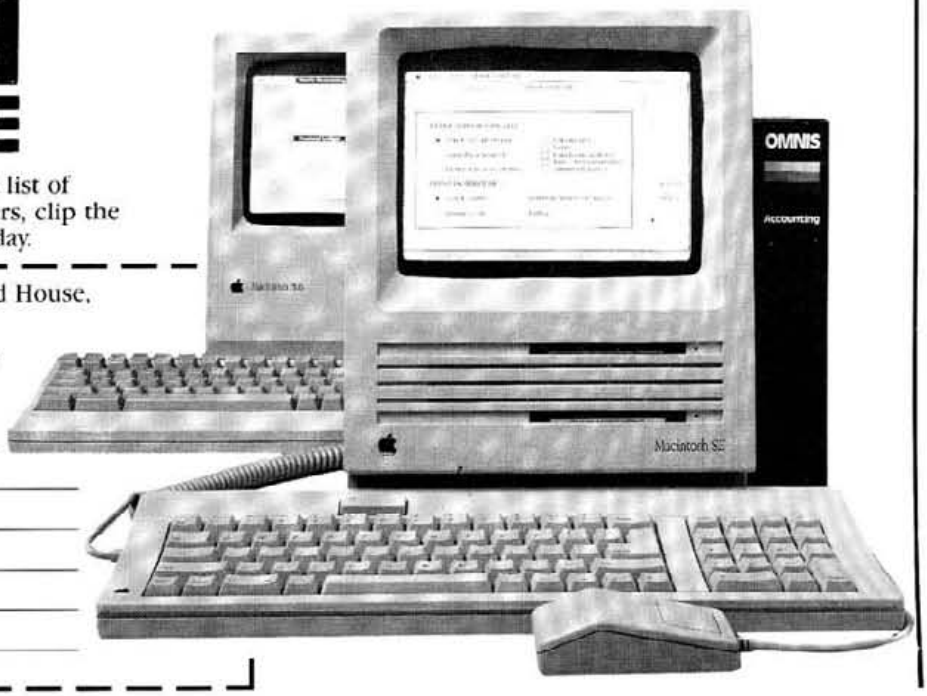

The best of MacPaint and MacDraw:

SuperPaint is the most advanced graphics creation tool available for the Macintosh. It has two layers; one for editing dots like MacPaint, and one for manipulating objects like MacDraw. The features read like a Christmas wishlist. Full-screen editing. Multiple windows. 3 levels of magnification. Reduced view. Creates shapes bigger than the screen. Draws circles and squares from the centre. Text can be edited. LaserWriter Fonts. Open and save MacDraw PICT and MacPaint files. Print multiple copies. Colour printing on ImageWriter II. Makes full use of big screens.
Best of all, there's LaserBits™, dot-by-dot editing at 300dots-per-inch resolution. The results printed on a LaserWriter are stunning! Paste these graphics into other programs and they retain their 300dpi resolution!
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- Tab indent left, indent right
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February 1987

1	SuperPaint
2	WriteNow
3	Dark Castle
4	MacGolf
5	Lightspeed Pascal
6	Lightspeed C
7	TML Pascal
8	More
9	Mac3D
10	Silicon Press

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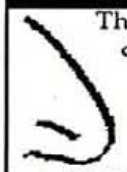

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